RESPONSE TO COMMENTS (part 1)
2004-2006 STATE OF NEW MEXICO
INTEGRATED §303(d)/ §305(b)
LIST OF ASSESSED SURFACE WATERS

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PLEASE NOTE:

Original letters that were not also received electronically were scanned into MSWord and converted to Arial 11 font with standard page margins for ease of collation. Contact information such as phone number, street addressed, and emails from private citizens were removed for privacy reasons. All originals letter of comment are on file at the SWQB office in Santa Fe, NM.

COMMON ACRONYMS

AU	Assessment Unit
NMAC	New Mexico Administrative Code
NMAC 20.6.4	State of New Mexico Standards for Interstate and Intrastate Surface Waters (as amended through October 11, 2002)
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
ROD	Record of Decision (for the 303(d) list)
SWQB	Surface Water Quality Bureau
TMDL	Total Maximum Daily Load
USEPA	United State Environmental Protection Agency
WQCC	Water Quality Control Commission
WQS	Water Quality Standards
WWTP	Wastewater Treatment Plant

CHANGES TO THE DRAFT LIST BASED ON SWQB STAFF REVIEW

Source code 108 “Rangeland (unmanaged pasture) Grazing” was changed to “Rangeland Grazing.”

Cause (impairment) code 400 “Total Fecal Coliform” was changed to “Fecal coliform” to alleviate any confusing between Total Coliform and Fecal Coliform.

Several Causes of Impairment were added to Glorieta Creek (Pecos River to headwaters) as a result of the 2001 SWQB intensive survey. Details are provided in the ROD.

Livestock Watering and Wildlife Habitat uses were changed from “Not Assessed” to “Full Support” and few were changed in the reverse fashion for several assessment units in the Gila River and San Francisco watersheds. These were inadvertently changed during the port from ADB v.1 to v.2, so they have been changed back based on the assessment of dissolved metals data.

COMMENT SET 1 – BHP Billiton

May 13, 2004

Lynette Guevara
NMED SWQB
Room N2163
PO Box 26110
Santa Fe, NM 87502

RE: Draft 2004-2006 Section 303(D)/ 305 (B) List of Assessed Surface Waters

Dear Lynette Guevara

We would like to formally submit comments for the Draft 2004-2006 Section 303(D)/305 (B) List of Assessed Surface waters.

1. For the La Plate River it states that the Probable Causes of Impairment are
   - Dissolved Oxygen and
   - Total Fecal Coliform.

And it also lists some Probable Sources of Impairment.

We feel the Probable Sources of Impairment listed as:
   - Flow Alterations from Water Diversions,
   - Loss of Riparian Habitat, and
   - Streambank Modifications/destabilization

would have little or no contribution to the Probable Causes of Impairment for the La Plata River and should be removed from the list.

RESPONSE: *The Probable Sources list is intended to include any and all activities that could be contributing to the identified impairment. It is not intended to single out any particular land owner or single land management activity, and has therefore been labeled "Probable" and generally includes several items. USEPA through guidance documents strongly encourages states to include a list of Probable Sources for each listed impairment. According to the 1998 305(b) report guidance, "…, states must always provide aggregate source category totals…" in the biennial submittal that fulfills CWA section 305(b)(1)(C) through (E) (USEPA 1997). "Sources" are defined as activities that may contribute pollutants or stressors to a water body (USEPA 1997).*

Data on Probable Sources is generally gathered by SWQB Monitoring and Assessment Section staff, as well as SWQB Watershed Protection Section staff, during implementation of intensive watershed surveys and watershed restoration projects, and is housed in the Assessment Database (ADB version 2). This database was developed by USEPA to help states manage information on surface water impairment and to generate 303(d)/305(b) reports and statistics. More specific information on Probable Sources of impairment is provided in individual watershed planning documents (i.e., Total Maximum Daily Loads, Watershed Restoration Action Strategies, etc.) as they are prepared to address individual impairments by assessment unit. SWQB staff believe that the above listed Probable Sources could be contributing to low dissolved oxygen levels and high bacteria levels, so they will remain on the list.

References: USEPA. 1997. Guidelines for preparation of the comprehensive state water quality assessments (305(b) reports) and electronic uptakes. EPA-841-B-97-002A. Washington, D.C.

2. At the April 22 San Juan Watershed Group meeting, it was stated that the La Plata River may be listed "tentatively" for Stream Bottom Deposits (SBD).

a.) The listing for SBD in <u>any</u> of the waters should not be included. Assumptions should not be made and SBD should only be listed once the National Sediment Lab submits is final findings.

***RESPONSE**: SWQB agrees that the National Sedimentation Lab report needed to develop the assessment protocol and make these final determinations is not available at this time. Accordingly, SWQB is not planning to change any of the previous listings related to Stream Bottom Deposits in the San Juan, Animas, or La Plata Rivers until the information is available. Once the protocol is drafted based on the results of the National Sedimentation Lab study and reviewed by USEPA, SWQB plans to open this limited portion of the list for a 30-day public comment period. This approach is supported by USEPA. This limited opening is tentatively scheduled to begin at the July 2004 WQCC meeting.*

b.) Andrew Simon of the National Sediment Lab states that there is a lesser amount of SBD contribution downstream of the Animas. Consequently the reaches below the Animas should not be listed for SBD.

***RESPONSE**: As noted above, listing decisions for the San Juan River basin will not be made until needed information is available. Additionally, the decision regarding stream bottom deposit impairment on San Juan tributaries downstream of the Animas (such as the La Plata River) is independent of the decision regarding stream bottom deposit impairment on reaches of the San Juan or Animas Rivers because they are different assessment units.*

c.) Research must be provided to show that SBD or sedimentation of the San Juan River is causing harm to aquatic life.

***RESPONSE**: Based on the National Sedimentation Lab project, SWQB is drafting an assessment procedure that will be used to determine potential stream bottom deposit impairment in the San Juan River. The current standard for the deposition of material on the bottom of a stream channel is specifically found in NMAC 20.6.4.12(A):*

> *Bottom Deposits: Surface waters of the State shall be free of water contaminants from other than natural causes that will settle and damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.*

Based on the second portion of this definition, SWQB is not required to prove that sedimentation if causing harm to aquatic life in order to make an impairment determination. SWQB recognizes that sediment condition is an important component of aquatic habitat, and strives to incorporate biorelevance into assessment procedures developed to determine whether or not this narrative standard is being met.

d.) With the recent amendments to the 40 CFR 434 regulations, EPA recognizes that the sedimentation or SBD of the water in western states is naturally high and that reduction in the natural sediment loads could have effects such as accelerated erosion and degradation of downstream channel beds.

For these reason's SBD should not be listed as a Probable Source of Impairment.

***RESPONSE**: Sediment transport capacity and sediment load dynamics are complex, which is why we developed a collaborative project with the National Sedimentation Lab to look at these dynamics in the San Juan Basin. SWQB believes the intent of these recent amendments was to recognize that all flowing waters have the ability to transport some sediment load (especially systems in the west that may have evolved to handle intense precipitation events), and that reduction of **natural** sediment loads could actually accelerate erosion from the bed and banks of streams because the sediment transport capacity to sediment load relationship may become unbalanced. USEPA is not implying with these amendments that western states should discontinue to monitor, assess, and attempt to reduce excessive non-natural sedimentation levels in streams. SWQB recognizes that determining natural sediment loads from man-made sediment loads is a difficult challenge. As noted above, no changes will be made to previous stream bottom deposit listings as **Causes** of Impairment until the needed information is available.*

3. In the Assessment Unit Comments for La Plata River we feel the statement that Marginal CW is inappropriate designated use does not go far enough. Due to the historical ephemeral nature of La Plata River it does not support Limited Warmwater Fishery as well and should also be removed from the Designated uses.

***REPONSE**: An "existing use" is defined in the State of New Mexico Water Quality Standards as a use actually attained in a surface water of the state on or after November 28, 1975, whether or not they are included in the water quality standards as a designated use (20.6.4.7.Q NMAC). There are historic fisheries data for several stations throughout the New Mexican portion of the La Plata River that indicate a marginal coldwater fishery existed after this date due to the presence of speckled dace and roundtail chub (Miller and Rees 2000, Sublette et al 1990). Speckled dace were also found during a SWQB fish survey approximately one mile south of the Colorado border in September 2002. According to Biotic Information System for New Mexico (BISON-M) (NMDG&F 2004), these two native species are considered coldwater taxa. Based on this additional fisheries data that was found while developing a response to BHP's comment, SWQB has removed the Assessment Unit Comment stating that marginal CWF is likely an inappropriate use since there is evidence of an "existing" coldwater fishery in the La Plata River.*

References:

Miller, W.J. and D. E. Rees. 2000. Ichthyofaunal Surveys of the Tributaries of the San Juan River, New Mexico. Fort Collins, CO.

New Mexico Department of Game and Fish in cooperation with USBOR, USBLM, USFS, USFWS, USCOE, and University of New Mexico. 2004. Biotic Information System for New Mexico (BISON-M). http://www.cmiweb.org/states/.

Sublette, J.E., M.D Hatch, and M Sublette. 1990. The Fishes of New Mexico. New Mexico Department of Game and Fish. UNM Press. Albuquerque, NM.

Sincerely,
Jim Luther
HSEC Superintendent
CC: SJM File

COMMENT SET 2 – Brett Bannon

-----Original Message-----
From: Brett and Jody Bannon [mailto:rio@bacavalley.com]
Sent: Friday, April 30, 2004 12:05 PM
To: David Graham; danny_davis@nmenv.state.nm.us; john_montgomery@nmenv.state.nm.us; james_davis@nmenv.state.nm.us; lynette_guevara@nmenv.state.nm.us
Subject: Concerns about areas designated as Cold Water Fishery for the Dry Cimarron

To whom this may concern:

I would like comment about some concerns that I have about the draft 2004_2006 State of New Mexico Clean Water Act (CWA) Integrated Section 303 (d)/305 (b) List of Assessed Surface Waters (integrated List).

My concerns are with how the Dry Cimarron River Basin waters are designated for use as Coldwater Fisheries. I am of the opinion that the following location are not suitable to be labeled such waters. I do not think that these surface waters are suitable for the support or propagation of coldwater fishes, due to higher water temperature and other characteristics, mainly the intermittent flow nature of many places on this stream.

- Carrizozo Creek (Dry Cimarron to headwaters)
- Oak Creek (Cry Cimarron to headwaters)

***RESPONSE**: Proposed changes to currently assigned designated uses cannot be addressed through the 303(d) listing process, and are instead proposed through revisions to the water quality standards. In the current (2004) triennial review of surface water quality standards, SWQB proposed that the Water Quality Control Commission (WQCC) change the designated uses for the Dry Cimarron River and its tributaries. If approved, the requested changes should address your concerns regarding the coldwater designation of these streams.*

The proposal asks that the perennial portions of the Dry Cimarron below Oak Creek and perennial portions of Long Canyon and Carrizozo creeks be changed from coldwater to warmwater, with a temperature criterion of 32.2 degrees C. The proposal also requests that perennial reaches of Oak Creek and the Dry Cimarron above Oak Creek be changed to warmwater and marginal coldwater, with a temperature criterion of 25 degrees C. These changes were based upon a water quality assessment of the Dry Cimarron River dated 2000 by SWQB staff.

A public discussion draft, which included this proposal, was released last year on February 21, 2003 along with a request for public comment. No comments were received regarding the Dry Cimarron proposal within the public comment period and the SWQB moved forward with that proposal as drafted. A hearing was held by a hearing officer for the WQCC on February 24 through March 4, 2004. Although the record of that hearing is now closed and it is too late to include your comments in the official record, no opposition to the proposal was voiced at the hearing. The WQCC will make its decision later this year after reviewing the hearing officer's report and the record of the hearing.

Another concern that I have, is how the Assessment Information list Rangeland (unmanaged Pasture) Grazing and Streambank Modification/destabilization as a Probable Sources of Impairment for the following listed areas. I feel that it is misguided to label these assessments with these uncertain sources. There are many areas in the Pre-Columbian alluvial record that show that the natural processes that historical have occurred in our canyon have resulted in deep cuts and streambank destabilization. It is incorrect to "blame" rangeland grazing on this process and make it appear as if it is an unnatural effect.

- Dry Cimarron River (Perennial reaches OK bnd to Oak Creek)
- Long Canyon (perennial reaches abv Dry Cimarron)

***RESPONSE**: The Probable Sources list is intended to include any and all activities that could be contributing to the identified impairment. It is not intended to single out any particular land owner or single land management activity, and has therefore been labeled "Probable" and generally includes several items. USEPA through guidance documents strongly encourages states to include a list of Probable Sources for each listed impairment. According to the 1998 305(b) report guidance, "…, states must always provide aggregate source category totals…" in the biennial submittal that fulfills CWA section 305(b)(1)(C) through (E) (USEPA 1997). "Sources" are defined as activities that may contribute pollutants or stressors to a water body (USEPA 1997).*

Data on Probable Sources is generally gathered by SWQB Monitoring and Assessment Section staff, as well as SWQB Watershed Protection Section staff, during implementation of intensive watershed surveys and watershed restoration projects, and is housed in the Assessment Database (ADB version 2). This database was developed by USEPA to help states manage information on surface water impairment and to generate 303(d)/305(b) reports and statistics. More specific information on Probable Sources of impairment is provided in individual watershed planning documents (i.e., Total Maximum Daily Loads, Watershed Restoration Action Strategies, etc.) as they are prepared to address individual impairments by assessment unit.

Based on your comments and similar comments received from other entities, SWQB has changed Probable Source code 108 "Rangeland (unmanaged pasture) Grazing" to "Rangeland Grazing" because more specific information on the level of management would be discussed in the above-mentioned documents. SWQB acknowledges that natural processes are also potentially contributing to impairment in the Cimarron watershed, and has therefore included "Natural Sources" in the Probable Sources for the water bodies listed above.

References: USEPA. 1997. Guidelines for preparation of the comprehensive state water quality assessments (305(b) reports) and electronic uptakes. EPA-841-B-97-002A. Washington, D.C.

My last concern, is to discover the reasons that the Oak Creek (Dry Cimarron to headwaters) was not assessed for Livestock Watering. These areas have historically been used for livestock watering.

***RESPONSE**: When the 2000 survey was planned, SWQB had not yet developed our in-house WQ database and semi-automated survey planning tools. This 2000 survey was*

designed by a review of historical data and previous 303(d) listings. Because no previous water quality standards exceedences for criteria listed under livestock watering were identified (including various dissolved metals and radionuclides), the survey lead did not put a high priority on collection of this data needed to verify livestock watering designated use attainment status. This error in planning should not occur in future surveys.

Respectfully

Brett Bannon

COMMENT SET 3 – Elephant Butte Irrigation District

April 16, 2004

New Mexico Environment Department
Surface Water Quality Bureau
Attention: Glenn Saums
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502-6110

Re: **Comments on the 303(d)/305(b) 2004 List of Impaired Surface Waters of the State**

My staff has reviewed the New Mexico Environment Department's (NMED) proposed 303(d)/305(b) list of impaired surface waters of the State. The Elephant Butte Irrigation District (EBID) is pleased to note that water quality is fully supporting virtually all of the designated uses for the major surface waters of the State of New Mexico in the Lower Rio Grande Basin. We are concerned that water quality in the Rio Grande for total coliform fails to meet the Commission adopted standards for secondary recreational contact in the reach of the river from Leasburg Dam downstream to the International Dam at El Paso. We note that no date has been set for setting TMDLs for bacterial pollutants in this reach of the Rio Grande.

***RESPONSE**: The proposed listing and associated criterion is for fecal coliform, not total coliform. SWQB changed cause (impairment) code 400 from "Total Fecal Coliform" to "Fecal Coliform" to reduce this confusion. The projected TMDL date was inadvertently not included. A tentative date of 2007 has been added and will be reflected in the revised final draft list. SWQB strives to set TMDL development dates that are less than three years following an intensive survey. As the criterion will likely change from fecal coliform to E. coli (see below), the setting of a TMDL date for fecal coliform may be irrelevant.*

The Elephant Butte Irrigation District recommends that the setting of a TMDL for bacterial sources be delayed until 2008. The following are a list of mitigating circumstances associated with the stream standards and the reach that will tend to make setting of a TMDL any earlier than 2008 very difficult**:**

a. the lower revised standard for fecal coliform for the reach became effective only in 2002;

***RESPONSE**: This fact is not relevant to the proposed listing. The proposed listing is based on the current water quality criterion. Also, this has no relevance to the setting of the proposed TMDL date.*

b. as part of the 2003 Triennial Review, the NMED has recommended that E. coli be used as the indicator for bacterial pollution in this reach; however there is no accumulated data for E. coli and it will take some time to determine compliance and to identify potential sources of pollution; and

***RESPONSE**: If the fecal coliform criterion is removed from the current Water Quality Standards and replaced with the proposed E. coli criterion, SWQB will instead collate and assess E. coli data to determine potential bacteriological impairment. E. coli data is being gathered during the 2004 intensive survey for this and other reasons. Additional data may be available from outside data sources as well. The proposed changes the WQS should be finalized by the end of 2004. There will likely be sufficient E. coli data to make a determination of impairment status by the end of 2005.*

c. both the EBID and the NMED have on going water quality studies that will not be completed until 2005 and then some time will be required to determine potential remedial actions.

***RESPONSE**: As noted in the Record of Decision, sufficient fecal coliform data already exists and was used to make the determination of impairment in the proposed 2004-2006 list. Data from the current 2004 intensive watershed survey in the Lower Rio Grande area should be received from the lab, QA/QC'd, and assessed by the end of 2005. Fecal coliform data from this effort will be combined with existing data to check the impairment status. E. coli data from the study would be used to determine impairment should the criterion change as proposed during the triennial review. Potential remedial actions do not need to be developed before TMDL development can occur. TMDLs are planning documents that can be used to assist with development of restoration strategies and remedial action plans.*

In the 303(d)/305(d) list, we are very concerned to find "flow alteration from water diversions" stated as a probable source of impairment when the probable "cause of impairment" is listed as "total fecal coliform". We fail to understand the logic of this listing and recommend that it be removed. There is no source of "fecal coliform" added to the flow of the Rio Grande when water is diverted from the river for use for one of the designated uses of this section of the river; that is, irrigated agriculture. Is the issue that diversion reduces the volume for flow in a stream? The exercise of a water right by diversion of a surface water of the State from a stream, for a beneficial use, cannot be viewed as contributing to impairment simply because there is no dilution water in the river to mitigate natural and made-related sources of pollution. The rational for the NMED listing is questionable and a revision made to delete "water diversion" as a "probable source of impairment".

***RESPONSE**: The Probable Sources list is intended to include any and all activities that could be contributing to the identified impairment. It is not intended to single out any particular land owner or single land management activity, and has therefore been labeled "Probable" and generally includes several items. Probable Sources listed for any particular water body have not been proven to be the only source(s) of the identified impairment. It is generally based on a visual analysis combined with knowledge of known land management activities that have the potential to contribute to the identified impairment. USEPA through guidance documents strongly encourages states to include a list of Probable Sources for each listed impairment. According to the 1998 305(b) report guidance, "…, states must always provide aggregate source category totals…" in the biennial submittal that fulfills CWA section 305(b)(1)(C) through (E) (USEPA 1997). "Sources" are defined as activities that may contribute pollutants or stressors to a water body (USEPA 1997).*

Flow Alteration from Water Divisions was included as a Probable Source for this reach of the Rio Grande to acknowledge that reductions in natural flow due to water diversions may result in higher concentrations of fecal coliform in the river due to a reduced volume of water. SWQB acknowledges that flow alteration does not directly introduce a load into a water body, but alterations in flow volume can affect concentrations of pollutants. Neither Probable Sources nor subsequent TMDL development will lead to a requirement for dilution flows or impact water rights in any way. The Clean Water Act and the New Mexico Water Quality Act both contain limitations that preclude requirements that would supersede water rights. SWQB is not attempting and has no plans to attempt to change water law in New Mexico.

References: USEPA. 1997. Guidelines for preparation of the comprehensive state water quality assessments (305(b) reports) and electronic uptakes. EPA-841-B-97-002A. Washington, D.C.

We note that animal pollution (cows, dogs, cats, horses), wildlife, and birds are not cited as probable sources of bacterial pollution in this reach of the river. Our observations show a sharp

increase in fecal coliform following periods of precipitation on the watershed between Leasburg Dam and Mesilla Dam. We believe that cattle and domestic animals are a likely source. We recommend that all NMED surveys in the area use sampling and analytical techniques to differentiate these sources of fecal coliform from human sources.

***RESPONSE**: Per your comment specific to this proposed listing, SWQB will add Rangeland Grazing, Waste from Pets, Waterfowl, and Wildlife Other Than Waterfowl to the list of Probable Sources based on your comment. Specific information regarding these potential sources of bacteriological contamination is determined in specific studies, such as bacterial source tracking (BST) studies, and usually follows initial TMDL development. Standard fecal coliform sampling methods utilized by SWQB during intensive watershed surveys do to not differentiate between exact sources of fecal coliform. SWQB does not have the financial resources to implement BST studies as a regular part of our intensive surveys. These studies are usually the result of separate funding sought by watershed groups and SWQB following initial TMDL development.*

Sincerely,

Gary L. Esslinger
Treasurer-Manager

GLE:JH/jln

Cc: John Hernandez
Phil King
Lee Peters

COMMENT SET 4 – Zang Wood

ZANG WOOD
FARMINGTON, NM

May 12,2004

NMED Surface Water Quality Bureau
1190 St. Francis Drive
PO Box 26110

Santa Fe, NM 87502

Attention: Lynette Guevara

This date I will Fax you a copy of this letter since it would be late in being included in the 30 day comment period if sent by mail. In addition, as a backup, I will mail a copy to you for your records.

Re: San Juan River [Animas River to Canon Largo] WQS: 20.6.4.401. I do not believe that SBD's are any greater now than at any time in the past. In fact, due to the lessened storm events which cause tremendous amounts of sand and silt to be carried downstream to the San Juan River, they are probably less. Having worked and traveled all over the huge drainage of the Largo country during the last 50 plus years and having observed the storm events and being stranded on one side or the other of the many arroyos that feed this drainage during this time, it is my opinion that this is a natural occurance. I know of numerous vehicles and construction equipment that have been "lost in the Largo". Fortunately, as far as I know, no lives have been lost.

Local urban legends have it that any vehicles or equipment that is sucked under by the quicksand will be carried down stream under the surface and will eventually be discharged into the San Juan. Such an occurance takes many years and I have never taken the time to determine the truthfulness of this legend. I do know that as a natural occurance the actions of the Largo and its results are ongoing, and to classify this stretch of the San Juan River as impaired because of these actions, is wrong!

***RESPONSE**: Thank you for your comment. Your years of observation of Cañon Largo and the San Juan River are valuable. Because there is an existing 303(d) listing for stream bottom deposit impairment for WQS segment 20.6.4.401 and sediment dynamics are complex, SWQB developed a collaborative study with the National Sedimentation Lab to develop a protocol to large river protocol to determine potential stream bottom deposit impairment, using the Animas and San Juan Rivers as case studies. Based on the preliminary results of the National Sedimentation Lab study, SWQB agrees that there is indication that Cañon Largo has the ability to supply a large volume of fine sediment to the San Juan River. This fact will be considered during the determination of whether or not the following narrative standard is currently being met in WQS segment 20.6.401. The current standard for the deposition of material on the bottom of a stream channel is specifically found in NMAC 20.6.4.12(A):*

Bottom Deposits: Surface waters of the State shall be free of water contaminants from other than natural causes that will settle and damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

The National Sedimentation Lab report needed to develop the assessment protocol and make this final determination is not available at this time. Accordingly, SWQB is not planning to change any of the previous listings related to Stream Bottom Deposits in the San Juan River until the information is available. Once the protocol is drafted based on the results of the National Sedimentation Lab study and reviewed by USEPA, SWQB plans to open this limited portion of the list for a 30-day public comment period. This approach is supported by USEPA. This limited opening is tentatively scheduled to begin at the July 2004 WQCC meeting.

I do not believe that anything can be done about the Largo. It has always been this way and always will. No amount of money or construction can change it. Leave it alone and learn to live with it as it is.

***RESPONSE**: Although there may be no cost effective measure to reduce the sediment load from Cañon Largo, it may be possible to modify the timing and magnitude of releases from Navajo Dam to help entrain and transport sediment loads from Cañon Largo down the San Juan River. This approach is consistent with the recommendations of the San Juan River Basic Recovery Implementation Program. If the reaches in WQS segment 20.6.4.401 are determined to be impaired due to excessive stream bottom deposits based on the results of the National Sedimentation Lab study and subsequent assessment protocol, these reaches may be most appropriately placed in Category 4B according to USEPA's integrated listing methodology (USEPA 2001):*

Impairment Categories --

4. Impaired for one or more designated uses, but does not require development of a TMDL because:

…B. Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future. Consistent with the regulation under 130.7(b)(i),(ii), and (iii), AUs are listed in this subcategory where other pollution control requirements required by local, state, or federal authority are stringent enough to implement any water quality standard (WQS) applicable to such waters.

As mentioned in the above response, this will all be discussed in the limited opening of the 303(d) with respect to the San Juan River basin stream bottom deposit listings, tentatively scheduled to begin at the July 2004 WQCC meeting.

References:

USEPA. 2001. 2002 Integrated water quality monitoring and assessment report guidance. Memorandum from Robert H. Wayland, Office of Wetlands, Oceans, and Watersheds. Washington, D.C

Thank you,

Zang Wood

COMMENT SET 5 – Conrad G. Keyes

Conrad G. Keyes
Ruidoso, NM 88355
April 20, 2004

Lynette Guevara
NMED SWQB Room N2163
P. 0. Box 26110
Santa Fe, New Mexico 87502

M/S Guevara

Thank you for inviting us to comment on our beautiful, RIO RUIDOSO RIVER. This is and always has been the great attraction of Lincoln County. With out the River and the springs we use to have, we will have nothing. Water is the main attraction. Why did the people that started the Ruidoso Downs Race Track chose to build along THE RIO RUIDOS0? To dry a crowd for their Pari-Mutual Betting Booths.

Ruidoso as many horse owners know, this altitude has caused many hoses to die of a heart failure. During the season of four months plus, there will be approximately, 1200 hundred head of horses stabled along side of our RIVER. While in their stalls 24 hours a day drinking a minimum of 12 gallons of water per 24 hour day, 14,400 gallons in 24 hours. How much urine will they create, and where will in go. Into the floor of their stall, and into the ground. The stalls are constantly being cleaned of the solid waste, piled in a place at end of building for such, until it is hauled by truck down stream on highway 70. Stacked along side of a dry arroyo, when the rains start, it will be washed into the RIO RUIDOSO RIVER. Mile Marker # 268 or there abouts is where the trucks turn north to the mountain of manuer they have built for many many racing seasons.

RESPONSE: *Two portions of the Rio Ruidoso are currently listed for plant nutrient impairment. The current narrative plant nutrient standard is specifically found in NMAC 20.6.4.12(E):*

> *Plant Nutrients: Plant nutrients from other than natural causes shall not be present in concentrations which will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state.*

Because of the 303d listings, the need to renew the Village of Ruidoso WWTP NPDES permit, and knowledge of land use activities such as the race track you mention above, SWQB staff performed the nutrient assessment protocol on the Rio Ruidoso in 2002. SWQB also performed an intensive watershed water quality survey of the Rio Hondo/Rio Ruidoso watershed in 2003. The survey was designed to generate data to determine designated use attainment status and to address a variety of water quality concerns, including potential nutrients from the race track and other potential sources in the watershed. All of the data collected from this survey has not yet been received, QA/QC'd, or assessed, so the results of the survey are not reflected in the draft 2004-2006 integrated 303(d)/305(b) list. They will be included in the 2006-2008 list.

Additionally, SWQB conducted an NPDES Compliance Evaluation Inspection at the Ruidoso Downs Track and Casino on March 24, 2003. The inspection was performed on behalf of the USEPA for its use to determine compliance with the NPDES permit program and federal Clean Water Act. Based on the inspection, USEPA found the Ruidoso Downs Track and Casino in violation of the Clean Water Act and initiated enforcement proceedings including orders that

corrective actions be taken (EPA A.O. Docket # CWA-06-2003-1953 issued 5/30/03 and USEPA Administrative Complaint Docket # CWA-06-2003-1778 issued 2/26/04).

As noted in the draft 2004-2006 list, SWQB is planning to develop TMDLs for the Rio Ruidoso by the end of 2005. SWQB has applied for special funding from USEPA Region 6 to enable us to complete the nutrient TMDLs by the end of 2004. This TMDL analysis will be used to finalize the renewal of the Village of Ruidoso WWTP NPDES permit and to assist the community with on-going projects to address nutrient concerns in the watershed. SWQB is currently working with the Rio Ruidoso Watershed Association through the Clean Water Act Section 319 Nonpoint Source Pollution Prevention program to reduce nonpoint sources of pollutants. The SWQB is also working with the Village of Ruidoso and City of Ruidoso Downs that co-operate the wastewater treatment facility. Both initiatives are, in part focused, on reducing nutrient contributions to the river and sewer collection system throughout the watershed.

Nobody living in the Hondo Valley has been able to use this water for drinking. Why has the laws of our great state not been changed to adjust for allowing a Horse Race Track, to create a condition as you can see the problem that has been going on for fifty years plus.

The Mescalero Apache Tribe built a Mescalero Lake, many years ago. It is a beautiful LAKE. The surface level or altitude of this lake is being maintained with ground water wells. Due to the drought and lack of surface from Sierra Blanca, they are keeping the lake at this level with their well. When the new Inn of The Mountain Gods is completed in 2005, it will bring in hundreds of more people to create more waste for our RIO RUIDOSO RIVER.

***RESPONSE**: Concerns regarding water quantity issues such as Mescalero Lake levels should be directed to the Office of the State Engineer (phone 505-827-6175).*

How can man continue to destroy his natural resources and survive?????????

Have a good day

Conrad G. Keyes

cgk/cc/file

COMMENT SET 6 – Molycorp Inc. Molybdenum Group

May 13, 2004

Lynette Stevens Guevara
New Mexico Environment Department
Surface Water Quality Bureau
1190 St. Francis Dr. Santa Fe, NM 87505

Subject: Molycorp's Comments on the *Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(d)l305(b) List of Assessed Surface Waters* and the *Draft Record of Decision (ROD) for the 2004 2006 State of New Mexico 303(b)/305(b) Integrated List for Assessed Surface Waters*

Dear Ms. Guevara:

Molycorp is pleased to submit to you our comments on the *Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(d)/305(b) List of Assessed Surface Waters* and the associated *Draft Record of Decision (ROD) for the 2004-2006 State of New Mexico 303(b)/305(b) Integrated List for Assessed Surface Waters.* Molycorp appreciates the opportunity to provide input to the New Mexico Environment Department during the development of these and other regulatory documents.

Molycorp solicited one of its expert consultants, Chadwick Ecological Consultants, Inc. ("CEC"), to review the subject documents on its behalf. The review focused on the listings of waters associated with the Red River and, overall, the documents appear to match what we know of the available data in the Red River. Additionally, Molycorp provides the following specific comments for your consideration.

Red River (Placer Creek to headwaters)
Red River (Placer Creek to headwaters) is listed as not supporting of a high quality coldwater fishery with the probable cause listed as "aluminum". However, the document fails to mention "water bioassay" issues. Chronic *Ceriodaphnia dubia* and *Pimephales promelas* toxicity tests conducted from water and sediment samples collected on October 25, 2000, at Zwergle by NMED showed significant effects on *C. dubia* reproduction for surface water samples and significant effects on *C. dubia* survival and reproduction for sediment samples. Since significant effects were observed in more than one chronic test; "water bioassay - chronic toxicity - freshwater" should be added as a cause of non-support in this segment, based on the NMED's protocol (see discussion under Red River - Rio Grande to Placer Creek below).

***RESPONSE**: Results from the two different media, namely water and sediment, were assessed separately. This approach was used consistently for all of the proposed toxicity listings on the draft 2004-2006 list. Because there were only one chronic water toxicity test and one chronic sediment toxicity test with significant effects noted as compared to controls or reference conditions collected between 1999-2003, the results did not trigger a listing for either water or sediment. SWQB will add clarifying language to future revisions of the Assessment Protocol regarding the assessment of results from different media.*

Red River (Rio Grande to Placer Creek)
Red River (Rio Grande to Placer Creek) is listed as not supporting the coldwater fishery use. The probable causes of impairment are listed as "aluminum" and "water bioassays - chronic

toxicity - freshwater". The water bioassays refer to chronic *C. dubia* and *P. promelas* toxicity tests conducted from water and sediment samples collected on October 25, 2000, downstream of Capulin seep and between Outfalls 002 and 001 by the NMED. These tests were conducted in conjunction with CEC on behalf of Molycorp during the pre-TMDL studies. For this testing, three sites were tested by NMED (with tests conducted by Region VI EPA in Dallas) and three sites tested by CEC at the request of Molycorp. The sites handled by CEC (downstream of Junebug Campground, downstream of Hansen Creek, and Goat Hill Campground) were not mentioned in the 303(d) ROD even through the data was shared with NMED and EPA at that time. However, the results of that toxicity testing found significant effects on *C. dubia* reproduction at the site downstream of Hansen Creek and from Goat Hill Campground for water tests. Significant reproductive effects were also seen for *C. dubia* at all three sites and *P. promelas* survival at Junebug Campground for sediment tests. It is important for NMED to acknowledge such "water bioassays" effects were observed upstream of Molycorp as well as their two sites downstream.

RESPONSE: *SWQB based the determination of toxicity impairment from the spreadsheet entitled "EPA Region 6 - State/EPA Ambient Toxicity Monitoring Program - Results for New Mexico 7/25/89 12/1/03" (http://www.epa.gov/earth1r6/6wq/ecopro/watershd/monitrng/toxnet/nm.pdf) and data received from outside sources. SWQB cannot locate the above-mentioned CEC data in either the USEPA spreadsheet or the data submitted by Molycorp on the CD dated July 29, 2003. Please re-submit these data for our files. SWQB will add a comment to the 303(d) ROD and add "sediment bioassays - chronic toxicity – freshwater" as a Cause of Impairment.*

Bitter Creek

Bitter Creek is listed as not supporting a high quality coldwater fishery with the probable cause listed as "aluminum" and "sedimentation/ siltation", the same as previous 303(d) lists. Placer Creek is listed as not supporting a high quality coldwater fishery with the probable cause listed as "aluminum". Bottom deposits are listed as fully supporting with impacts observed. We have not sampled these streams specifically, so we cannot add any more information.

RESPONSE: *Although several pre-2004 ROD entries still refer to the term "fully supporting with impacts observed," please note that this terminology is not being used for the 2004-2006 listing cycle on (see the below language that was extracted from the Explanatory Notes posted to help reviewers during the comment period):*

> *"…B. "Attainment Status"*
> *Individual designated use support is first determined in a similar fashion to years past, except the determination of "Partial Support" was folded into "Non Support," and "Full Support Impacts Observed" was folded into "Full Support.""*

Cabresto Creek

Cabresto Creek is listed as fully supporting for all designated uses in the 2004 State of New Mexico 303(d) List of Impaired Surface Waters; however, the ROD states that the listing remains for aluminum. The NMED should clarify if Cabresto Creek is listed as fully supporting all uses, or if problems remain for aluminum with impacts observed, or if the discrepancy between the 303(d) list and the ROD is an error.

RESPONSE*: SWQB contends that Cabresto Creek should not remain listed for aluminum because the more recent multi-season, multi-station data submitted by Molycorp did not*

indicate impairment due to aluminum. The ROD has been corrected to match the303d/305b list.

Pioneer Creek
Pioneer Creek is listed as fully supporting with stream bottom deposits fully supporting, but "impacts observed", which appears to be a contradiction and should be clarified.

***RESPONSE**: The turbidity listing was inadvertently removed from the list presumably as a result of the port from the Assessment Database v.1 to v.2. The ROD is correct – Pioneer Creek will remain listed for turbidity, and was de-listed for stream bottom deposits during the 2002-2004 listing cycle.*

Although several pre-2004 ROD entries still refer to the term "fully supporting with impacts observed," please note that this terminology is not being used for the 2004-2006 listing cycle on (see the below language that was extracted from the Explanatory Notes posted to help reviewers during the comment period):

> *B. "Attainment Status"*
> *Individual designated use support is first determined in a similar fashion to years past, except the determination of "Partial Support" was folded into "Non Support," and "Full Support Impacts Observed" was folded into "Full Support."*

Should you have any questions or require additional information, please contact me at (505) 586-7638.

Sincerely,

Harvey Seto
Sr. Environmental Specialist

Cc: A. Wagner, Molycorp
B. Sharrer, Molycorp
S. Canton, Chadwick Ecological
J. Chadwick, Chadwick Ecological

COMMENT SET 7 -- New Mexico Cattle Growers' Association

May 11, 2004

New Mexico Environment Department
Surface Water Quality Bureau
Room N2163
Attn: Lynette Guevara
P.O. Box 26110
Santa Fe, New Mexico 87502

FAX: 505.827.0160
EMAIL: lynette_guevara@nmenv.state.nm.us

RE: New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) 2004-2006 State of New Mexico Clean Water Act (CWA) Integrated Section 303(d)/305(b) List of Assessed Surface Waters (Integrated List).

Dear Ms. Guevara:

Thank you for the opportunity to comment on the above caption proposal. The New Mexico Cattle Growers' Association (NMCGA) appreciates the need to safeguard water quality based on assessment standards that incorporate sound, repeatable science.

NMCGA would like to go on record as stating that the 305(b) draft document should have been included for public comment. The 305(b) document incorporates descriptions of nonpoint sources of pollution, recommendations and strategy for controls and is the basis of the methodology for assessment protocols used for evaluation. The public should be able to comment on the entire document, not just a complicated, technical analysis. The 303(d) list is based on scientific criteria and language and in order to make substantive comments, an individual needs to have extensive knowledge of the technical procedures. Landowners and the general public are usually not scientists, hydrologists, or engineers, so the process is extremely difficult, if not impossible. New Mexico Environment Department (NMED) integrates the 305(b) with the 303(d) list for review by the United States Environmental Protection Agency (USEPA), so its inclusion would be a logical progression of documents for public comment. By not allowing public comment on the 305(b) document the public is barred from reviewing or contributing to an integral part of a report that may affect them directly in the future. NMCGA requests that NMED make the 305(b) report available for public comment with an extension of the comment period for an additional thirty days.

***RESPONSE**: The SWQB prepares the text of the draft 305(b) report as a summary of surface water quality information contained in the 303(d) list. Summary information on ground water and drinking water quality programs is also provided to the SWQB for inclusion in the 305(b) report by other agencies charged with monitoring and protecting water quality in the state.*

The Clean Water Act requires that the 303(d) list of impaired waters (i.e., Category 5 on the 303(d) list) be opened for a minimum 30-day public comment period. Public comments on the 303(d) list help improve the accuracy of the list (and thus the text of the 305(b) report), because individuals and entities that live and work in a particular watershed may have access to information and data regarding potential causes and sources of impairment that were not known to the developers of the draft 303(d) list (i.e., SWQB).

NMED opened the 303(d) list for public comment from April 13, 2004 through May 13, 2004. Comments were solicited on all of the information that is incorporated into the 303(d) list,

including impaired stream listings, probable sources and causes of impairment (point and nonpoint sources), designated uses, and use attainment. Many entities provided comments during the public comment period, and NMED prepared this Response to Comments document based on all of the information received.

The 303(d) list, as modified by comments, was then used to generate the final draft text of the 305(b) document pertaining to surface water quality, which is intended to be a summary of the status of waters in the state based on established monitoring and assessment procedures. The integrated 303(d)/305(b) report, which includes the list, will be presented to the WQCC for approval at a public meeting on June 8, 2003. All associated materials, including the final draft integrated list, the associated Record of Decision, and the Response to Comments, will be posted to the SWQB web site 10 days prior to the WQCC meeting. The final report will then be submitted to USEPA no later than the July 1, 2004 deadline.

NMCGA has the following comments for your review and consideration:

- Designated reaches under Category 5 list probable sources of impairment. One source listed is "rangeland (unmanaged pasture) grazing". It is sometimes listed as the only probable source which is confusing. When listed as the only probable source, does this mean it has been proven to be the only source or does the process include visual analysis, which means that only grazing lands are observed so it is the listed as the sole source? It seems highly unlikely that grazing would be the only cause for impairment. Research has demonstrated that drought conditions degrade water quality. New Mexico is currently suffering a severe drought and has been for a number of years. This fact does not appear to be taken into consideration. Drought affects erosion. Excessive runoff is also more prevalent during periods of drought. Additionally, cattle numbers have been declining since the 1920s and today best management practices and other options used by ranchers have considerably reduced cattle impact on streams. Wildlife does have a significant impact on water quality, but these impacts have never been documented in this listing. Is there a reason for the impact not being included?

***RESPONSE**: The Probable Sources list is intended to include any and all activities that could be contributing to the identified impairment. It is not intended to single out any particular land owner or single land management activity, and has therefore been labeled "Probable" and generally includes several items. Probable sources listed for any particular water body have not been proven to be the only source(s) of the identified impairment. It is generally based on a visual analysis combined with knowledge of known land management activities that have the potential to contribute to the identified impairment. One of the primary reasons we solicit public comment on the integrated 303(d)/305(b) list is so entities and individuals living and working in particular watersheds can provided specific information regarding Probable Sources of impairment that may have not been identified by SWQB staff. USEPA through guidance documents strongly encourages states to include a list of Probable Sources for each listed impairment. According to the 1998 305(b) report guidance, "…, states must always provide aggregate source category totals…" in the biennial submittal that fulfills CWA section 305(b)(1)(C) through (E) (USEPA 1997). "Sources" are defined as activities that may contribute pollutants or stressors to a water body (USEPA 1997).*

Data on Probable Sources is generally gathered by SWQB Monitoring and Assessment Section staff, as well as SWQB Watershed Protection Section staff, during implementation of intensive watershed surveys and watershed restoration projects, and is housed in the Assessment Database (ADB version 2). This database was developed by USEPA to help states manage information on surface water impairment and to generate 303(d)/305(b) reports and statistics.

There is a Probable Source category in ADB v.2 entitled "Drought-related Impacts" that could be and has been added to specific assessment units as appropriate based on specific comments received. More specific information on Probable Sources of impairment is provided in individual watershed planning documents (i.e., Total Maximum Daily Loads, Watershed Restoration Action Strategies, etc.) as they are prepared to address individual impairments by assessment unit. Based on your comments and similar comments received from other entities, SWQB has changed Probable Source code 108 "Rangeland (unmanaged pasture) Grazing" to "Rangeland Grazing" because more specific information on the level of management would be discussed in the above-mentioned documents.

Wildlife can have impacts on certain water quality parameters (such as excessive pathogens from a large number of waterfowl or sedimentation from excessive riparian grazing by elk), but this is difficult to determine by visual observation because wildlife are generally more elusive than livestock. This information is determined in specific studies, such as bacterial source tracking (BST) studies, and usually follows initial TMDL development.

As stated in the Assessment Protocol (NMED/SWQB 2004), data collected during all flow conditions, including low flow conditions (i.e., flows below the 4Q3), will be used to determine designated use attainment status during the assessment process. 4Q3 values are to be utilized as minimum dilution assumptions for developing discharge permit effluent limitations. In terms of assessing designated use attainment in ambient surface waters, WQS apply at all times under all flow conditions.

Regarding drought, studies have shown that variability in hydrologic conditions is the norm in New Mexico (Grissino-Mayer 1996). New Mexico is currently within this range of variability (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). If we consider the current hydrologic condition in terms of decades, the drier conditions we have experienced over the last several years could be considered typical and normal. Paleo-environmental records indicate that our region has experienced long periods of drought that lasted decades (Grissino-Mayer 1996). The "drought" conditions we are currently experiencing could actually be the mean condition when considering this time frame. Also, the current drier conditions we are experiencing could last years to decades (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). SWQB must continue to monitor, assessment, and make use impairment determinations under these conditions in order to protect and enhance water quality in New Mexico.

References:

Grissino-Mayer, H. 1996. A 2129-year reconstruction of precipitation for northwestern New Mexico, U.S.A. Pages 191-204 in J. S. Dean, D. M. Meko, and T. W. Swetnam, editors. Tree Rings, Environment and Humanity. Radiocarbon, Tucson, AZ.

NMED/SWQB. 2004. State of New Mexico Procedures for Assessing Standards Attainment for the Integrated §303(d)/§305(b) Water Quality Monitoring and Assessment Report. Santa Fe, NM.

USEPA. 1997. Guidelines for preparation of the comprehensive state water quality assessments (305(b) reports) and electronic uptakes. EPA-841-B-97-002A. Washington, D.C.

- It would also seem helpful to the process to involve landowners and the trade organizations that represent them. NMED distributes 319 grant funding from the USEPA in New Mexico, and perhaps a more diverse approach can be implemented when

distributing these funds. This could involve landowners by encouraging them to be proactive in promoting their current resource protection activities and incorporating greater efficiency with new management tools. In addition, landowners will have the necessary information on the listed segments in their areas, the process of listing segments, the process of de-listing segments; and the practices in their operations that have or will minimize run-off and protect water and land resources.

***RESPONSE**: Your comment will be passed on to the SWQB Watershed Protection Section. SWQB recognizes the need for more education on water quality monitoring, assessment, and listing processes to land owners and managers, and has begun developing an outreach program to address this issue. We hope to hold a series of meetings around the state in the late fall or early winter.*

Regarding 319 fund, the SWQB Watershed Protection Section issues two different Requests for Proposals (RFPs). The focus is to first form a watershed group so that there is a local entity in the watershed to then apply for on-the-ground monies. The approaches are described below:

Watershed Group Formation RFP

The SWQB Watershed Protection Section requests proposals from individuals, organizations, and governmental entities for the purpose of developing or assisting with development of a watershed group in areas where total maximum daily loads (TMDL) have been written or where data has been assessed and will lead to future TMDL development. The goal of this RFP is to develop watershed groups in areas where none exists or where assistance is needed to ensure that the existing watershed group encompasses the entire eight-digit watershed. The watershed group will develop strategies that focus in the future on best management practice (BMP) implementation that address TMDLs. A TMDL can be best described as a subwatershed budget for pollutant influx to a watercourse. TMDLs are established for individual stream segments by pollutant. The SWQB develops TMDLs for waters listed on the Clean Water Act (CWA) section 303(d) list of impaired waters. The TMDL documents are planning documents that provide pollution reduction targets and guidance on how to reduce pollutant loads. All TMDLs in a particular watershed should be prioritized and included in the watershed group's watershed restoration action strategy (WRAS) in order to address impairments in an orderly and holistic manner. Watershed group formation is the precursor to future funding opportunities for on-the-ground projects to implement BMPs that address TMDLs and rehabilitate impaired stream reaches listed in this RFP.

On-the-Ground RFP

The SWQB Watershed Protection Section requests proposals from established watershed groups for the purpose of implementing on-the-ground projects within specified watersheds in order to reduce pollutant loads and restore the health of the watershed. On-the-ground projects must apply best management practices (BMPs) in order to implement Total Maximum Daily Loads (TMDLs) in impaired stream reaches within the watershed. All TMDLs in a particular watershed should be prioritized and included in the watershed group's watershed restoration action strategy (WRAS) in order to address impairments in an orderly and holistic manner. A TMDL can be best described as a subwatershed budget for pollutant influx to a watercourse. TMDLs are established for individual stream segments, by pollutant. The SWQB develops TMDLs

for waters listed on the Clean Water Act (CWA) section 303(d) list of impaired waters. The TMDL documents are planning documents that provide pollution reduction targets and guidance on how to reduce pollutant loads.

- Ranchers are for the first time in many years, being encouraged to use fire in their efforts to restore the rangeland to natural savannah conditions. This used to be a common practice but actions from certain environmental groups prevented the use of burns for control of woody species that degraded water quality. Even though some bureaus in NMED are encouraging burns, air quality regulations continue to make this endeavor complicated.

***RESPONSE**: Your comment will be passed on to the Air Quality Bureau. SWQB recognizes the role of fire in the natural ecosystem.*

Thank you in advance for your attention and we look forward to answers to the questions posed here as well as participation the remainder of this process.

Sincerely,

Caren Cowan
Executive Director

cc: Water Quality Control Commission

COMMENT SET 8 -- New Mexico Farm and Livestock Bureau

May 13, 2004

Lynette Guevara
NMED-SWQB
Room N2163
P.O. Box 26110
Santa Fe, New Mexico 87502

Dear Ms. Guevara:

Thank you for Ms. Leavitt's and your assistance on May 11, 2004 pertaining to the commenting on New Mexico's 303(d) and 305(b) Integrated Report. As we understand the law, we should be allowed to comment on the Integrated Report. However, it appears that the department policy is restricting the public comments to the Section 303(d) list only and not the 305(b) report.

***RESPONSE**: The SWQB prepares the text of the draft 305(b) report as a summary of surface water quality information contained in the 303(d) list. Summary information on ground water and drinking water quality programs is also provided to the SWQB for inclusion in the 305(b) report by other agencies charged with monitoring and protecting water quality in the state.*

The Clean Water Act requires that the 303(d) list of impaired waters (i.e., Category 5 on the 303(d) list) be opened for a minimum 30-day public comment period. Public comments on the 303(d) list help improve the accuracy of the list (and thus the text of the 305(b) report), because individuals and entities that live and work in a particular watershed may have access to information and data regarding potential causes and sources of impairment that were not known to the developers of the draft 303(d) list (i.e., SWQB).

NMED opened the 303(d) list for public comment from April 13, 2004 through May 13, 2004. Comments were solicited on all of the information that is incorporated into the 303(d) list, including impaired stream listings, probable sources and causes of impairment (point and nonpoint sources), designated uses, and use attainment. Many entities provided comments during the public comment period, and NMED prepared this Response to Comments document based on all of the information received.

The 303(d) list, as modified by comments, was then used to generate the final draft text of the 305(b) document pertaining to surface water quality, which is intended to be a summary of the status of waters in the state based on established monitoring and assessment procedures. The integrated 303(d)/305(b) report, which includes the list, will be presented to the WQCC for approval at a public meeting on June 8, 2003. All associated materials, including the final draft integrated list, the associated Record of Decision, and the Response to Comments, will be posted to the SWQB web site 10 days prior to the WQCC meeting. The final report will then be submitted to USEPA no later than the July 1, 2004 deadline.

According to a 2004 Environmental Protection Agency (EPA) guidance document for assessing, listing, and reporting requirements, the 303(d) and 305(b) Integrated Report provides a comprehensive summary for the public and stakeholders. This guidance document states that the public and stakeholders are to be allowed to participate in the development of the Integrated Report. Without the opportunity to review the entire Integrated Report, it is impossible to provide comments on methodologies and determine the appropriateness of how and why decisions were

made. Additionally, according to EPA's guidance document, your department should explain how the final assessments were derived.

Therefore, we request that the 305(b) report be available to the public and stakeholders for review and commenting along with the 303(d) list. We also request that the commenting period be extended for another 30 days in order to allow for sufficient stakeholder and public participation as required.

***RESPONSE**: The intent of the public participation section in the 2004 guidance (Section K) was fulfilled through the opening of the 303(d) list for 30-day comment as detailed in Work Element 11 -- Public Participation – in the New Mexico Water Quality Management Plan which was approved May 13, 2003, by the WQCC. As noted in the guidance, the final submittal to USEPA will include a summary of all public participation during development of the final integrated report. As detailed in the above response, the information in the 303(d) list is used to generate the final draft text of the integrated report, so public comment on the list is reflected in the report. As explained in the Explanatory Notes document that is posted on the SWQB website along with the draft list and draft Record of Decision, the methods used by SWQB to determine attainment status are detailed in the Assessment Protocol (NMED/SWQB 2004). This document is available in the Library section of the SWQB website. SWQB solicits comment on this document as well.*

Thank you for your understanding.

Sincerely,

John F. Wortman, Jr.
Executive Vice President

cc: NM Water Quality Control Commission
Senator Phil Griego

COMMENT SET 9 – New Mexico Interstate Stream Commission

May 13, 2004

Lynette Guevara
New Mexico Environment Department
Surface Water Quality Bureau
Room N2163
P.O. Box 26110
Santa Fe, New Mexico 87502

Subject: Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(D)/305(B) List of Assessed Surface Waters

Dear Ms. Guevara:

This letter pertains to comments on the San Juan River portion of the subject Draft List of Assessed Surface Waters.

The 2004 actions for the San Juan River (Animas River to Canon Largo), WQS: 20.6.4.401, AU: NM-240100, states that "...the bed material and fluvial geomorphology data indicate **potential** impairment due to stream bottom deposits as a result of large episodic sediment inputs from Canyon Largo (sic) and other ephemeral drainages possibly combined With loss of spring flows adequate to move the sediment through the system as a result of Navajo Dam operations" (emphasis supplied). The 2004 actions for the San Juan River (Navajo bnd (sic) at the Hogback to the Animas River), WQS: 20.6.4.401, U: NM-2401_10, states that "...the bed material and fluvial geomorphology data indicate **moderate** impairment due to stream bottom deposits as a result of large episodic sediment inputs from Canyon Largo (sic) and other ephemeral drainages possibly combined with loss of spring flows adequate to move the sediment through the system (emphasis supplied). These statements are inaccurate regarding Navajo Dam operations and should be reviewed.

Following the recommendations of the San Juan - River Basin Recovery Implementation Program's Biology Committee, Navajo Dam has been operated since 1992 to mimic the natural streamflow hydrograph to provide high spring releases at the maximum channel capacity below Navajo Dam for the purpose of providing flows to flush sediment for the purpose of cleaning cobble bars and secondary channels in the San Juan River. Spring releases also have been timed to occur with the high spring flows of the Animas River to provide the maximum flushing effect in the San Juan River below its confluence with the Animas River. As a result, Navajo Dam operations have in fact provided flows necessary to move sediment through the system.

***RESPONSE**: It may be possible to modify the timing and magnitude of releases from Navajo Dam to help entrain and transport sediment loads from Cañon Largo down the San Juan River. This approach is consistent with the recommendations of the San Juan River Basic Recovery Implementation Program to assist in the recovery of two endangered fish species. Following the San Juan Model Operating Rule Decision Tree, there was not a spring release in either 2002 (the year of SWQB's intensive water quality survey) or 2003 (the year all field work was completed in October and November for the National Sedimentation Lab project). There will*

also be no spring release this year. Therefore, there was "a loss of spring flows" during the SWQB study years, and the San Juan River continues to experience a loss of spring flows. The statement was also intended to acknowledge the recommendations of the San Juan – River Basin Recovery Implementation Program. SWQB added clarifying language to all three San Juan River ROD entries.

Also, it is SWQB's understanding that continuation of these spring releases is dependent upon final approval of the 250 low flow/5000 high flow preferred alternative or the 500 low flow/5000 high flow alternative in the draft Navajo Dam EIS. The No Action alternative, if selected, would not require continuation of high spring releases on a regular basis (Pat Page, USBOR, personal communication).

Sediment loads from Cañon Largo (or Largo Canyon in English as opposed to the Spanish name) and other ephemeral drainages result from natural and human activity in the intervening drainages between Cañon Largo and the Navajo Reservation boundary at the Hogback. Also, low flows during drought in recent years or other natural or human-caused activity may have contributed to the observed 2004 condition of stream bottom sediment deposits. It is recommended that both statements be modified to eliminate the reference to Navajo Dam operations.

***RESPONSE**: "Canyon Largo" was changed to "Cañon Largo" in the ROD. It is correct on the list. SWQB agrees that bed material characteristics measured in October and November 2003 may have been impacted by drought conditions and the lack of high spring releases the two prior springs, and have added a note to the ROD. Probable Source category 39 "Drought related impacts" was also added to all of the San Juan, Animas, and La Plata River listings.*

The National Sedimentation Lab report needed to develop the assessment protocol and make these final determinations is not available at this time. Accordingly, SWQB is not planning to change any of the previous listings related to Stream Bottom Deposits in the San Juan, Animas, or La Plata Rivers until the information is available. Once the protocol is drafted based on the results of the National Sedimentation Lab study and reviewed by USEPA, SWQB plans to open this limited portion of the list for a 30-day public comment period. This approach is supported by USEPA. This limited opening is tentatively scheduled to begin at the July 2004 WQCC meeting.

Please contact me at 827-6172 or Jay Groseclose of this office at 827-6165 if you have any questions or need additional information.

Sincerely,

John Whipple
Staff Engineer

cc: Doug Murray, Interstate Stream Commission
Dan Rubin, Interstate Stream Commission

COMMENT SET 10 -- New Mexico Public Lands Council

May 11, 2004

New Mexico Environment Department

Surface Water Quality Bureau

Room N2163 FAX: 505.827.0160

Attn: Lynette Guevara EMAIL: lynette_guevara@nmenv.state.nm.us

P.O. Box 26110

Santa Fe, New Mexico 87502

RE: New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) 2004-2006 State of New Mexico Clean Water Act (CWA) Integrated Section 303(d)/305(b) List of Assessed Surface Waters (Integrated List).

Dear Ms. Guevara:

Thank you for the opportunity to comment on the above caption proposal. The New Mexico Public Lands Council (NMPLC) appreciates the need to safeguard water quality based on assessment standards that incorporate sound, repeatable science.

NMPLC would like to go on record as stating that the 305(b) draft document should have been included for public comment. The 305(b) document incorporates descriptions of nonpoint sources of pollution, recommendations and strategy for controls and is the basis of the methodology for assessment protocols used for evaluation. The public should be able to comment on the entire document, not just a complicated, technical analysis. The 303(d) list is based on scientific criteria and language and in order to make substantive comments, an individual needs to have extensive knowledge of the technical procedures. Landowners and the general public are usually not scientists, hydrologists, or engineers, so the process is extremely difficult, if not impossible. New Mexico Environment Department (NMED) integrates the 305(b) with the 303(d) list for review by the United States Environmental Protection Agency (USEPA), so its inclusion would be a logical progression of documents for public comment. By not allowing public comment on the 305(b) document the public is barred from reviewing or contributing to an integral part of a report that may affect them directly in the future. NMPLC requests that NMED make the 305(b) report available for public comment with an extension of the comment period for an additional thirty days.

***RESPONSE**: The SWQB prepares the text of the draft 305(b) report as a summary of surface water quality information contained in the 303(d) list. Summary information on ground water and drinking water quality programs is also provided to the SWQB for inclusion in the 305(b) report by other agencies charged with monitoring and protecting water quality in the state.*

The Clean Water Act requires that the 303(d) list of impaired waters (i.e., Category 5 on the 303(d) list) be opened for a minimum 30-day public comment period. Public comments on the 303(d) list help improve the accuracy of the list (and thus the text of the 305(b) report), because individuals and entities that live and work in a particular watershed may have access to

information and data regarding potential causes and sources of impairment that were not known to the developers of the draft 303(d) list (i.e., SWQB).

NMED opened the 303(d) list for public comment from April 13, 2004 through May 13, 2004. Comments were solicited on all of the information that is incorporated into the 303(d) list, including impaired stream listings, probable sources and causes of impairment (point and nonpoint sources), designated uses, and use attainment. Many entities provided comments during the public comment period, and NMED prepared this Response to Comments document based on all of the information received.

The 303(d) list, as modified by comments, was then used to generate the final draft text of the 305(b) document pertaining to surface water quality, which is intended to be a summary of the status of waters in the state based on established monitoring and assessment procedures. The integrated 303(d)/305(b) report, which includes the list, will be presented to the WQCC for approval at a public meeting on June 8, 2003. All associated materials, including the final draft integrated list, the associated Record of Decision, and the Response to Comments, will be posted to the SWQB web site 10 days prior to the WQCC meeting. The final report will then be submitted to USEPA no later than the July 1, 2004 deadline.

NMPLC has the following comments for your review and consideration:

· Designated reaches under Category 5 list probable sources of impairment. One source listed is "rangeland (unmanaged pasture) grazing". It is sometimes listed as the only probable source which is confusing. When listed as the only probable source, does this mean it has been proven to be the only source or does the process include visual analysis, which means that only grazing lands are observed so it is the listed as the sole source? It seems highly unlikely that grazing would be the only cause for impairment. Research has demonstrated that drought conditions degrade water quality. New Mexico is currently suffering a severe drought and has been for a number of years. This fact does not appear to be taken into consideration. Drought affects erosion. Excessive runoff is also more prevalent during periods of drought. Additionally, cattle numbers have been declining since the 1920s and today best management practices and other options used by ranchers have considerably reduced cattle impact on streams. Wildlife does have a significant impact on water quality, but these impacts have never been documented in this listing. Is there a reason for the impact not being included?

RESPONSE*: The Probable Sources list is intended to include any and all activities that could be contributing to the identified impairment. It is not intended to single out any particular land owner or single land management activity, and has therefore been labeled "Probable" and generally includes several items. Probable sources listed for any particular water body have not been proven to be the only source(s) of the identified impairment. It is generally based on a visual analysis combined with knowledge of known land management activities that have the potential to contribute to the identified impairment. One of the primary reasons we solicit public comment on the integrated 303(d)/305(b) list is so entities and individuals living and working in particular watersheds can provided specific information regarding Probable Sources of impairment that may have not been identified by SWQB staff. USEPA through guidance documents strongly encourages states to include a list of Probable Sources for each listed impairment. According to the 1998 305(b) report guidance, "…, states must always provide aggregate source category totals…" in the biennial submittal that fulfills CWA section 305(b)(1)(C) through (E) (USEPA 1997). "Sources" are defined as activities that may contribute pollutants or stressors to a water body (USEPA 1997).*

Data on Probable Sources is generally gathered by SWQB Monitoring and Assessment Section staff, as well as SWQB Watershed Protection Section staff, during implementation of intensive watershed surveys and watershed restoration projects, and is housed in the Assessment Database (ADB version 2). This database was developed by USEPA to help states manage information on surface water impairment and to generate 303(d)/305(b) reports and statistics.

There is a Probable Source category in ADB v.2 entitled "Drought-related Impacts" that could be and has been added to specific assessment units as appropriate based on specific comments received. More specific information on Probable Sources of impairment is provided in individual watershed planning documents (i.e., Total Maximum Daily Loads, Watershed Restoration Action Strategies, etc.) as they are prepared to address individual impairments by assessment unit. Based on your comments and similar comments received from other entities, SWQB has changed Probable Source code 108 "Rangeland (unmanaged pasture) Grazing" to "Rangeland Grazing" because more specific information on the level of management would be discussed in the above-mentioned documents.

Wildlife can have impacts on certain water quality parameters (such as excessive pathogens from a large number of waterfowl or sedimentation from excessive riparian grazing by elk), but this is difficult to determine by visual observation because wildlife are generally more elusive than livestock. This information is determined in specific studies, such as bacterial source tracking (BST) studies, and usually follows initial TMDL development.

As stated in the Assessment Protocol (NMED/SWQB 2004), data collected during all flow conditions, including low flow conditions (i.e., flows below the 4Q3), will be used to determine designated use attainment status during the assessment process. 4Q3 values are to be utilized as minimum dilution assumptions for developing discharge permit effluent limitations. In terms of assessing designated use attainment in ambient surface waters, WQS apply at all times under all flow conditions.

Regarding drought, studies have shown that variability in hydrologic conditions is the norm in New Mexico (Grissino-Mayer 1996). New Mexico is currently within this range of variability (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). If we consider the current hydrologic condition in terms of decades, the drier conditions we have experienced over the last several years could be considered typical and normal. Paleo-environmental records indicate that our region has experienced long periods of drought that lasted decades (Grissino-Mayer 1996). The "drought" conditions we are currently experiencing could actually be the mean condition when considering this time frame. Also, the current drier conditions we are experiencing could last years to decades (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). SWQB must continue to monitor, assessment, and make use impairment determinations under these conditions in order to protect and enhance water quality in New Mexico.

References:

Grissino-Mayer, H. 1996. A 2129-year reconstruction of precipitation for northwestern New Mexico, U.S.A. Pages 191-204 in J. S. Dean, D. M. Meko, and T. W. Swetnam, editors. Tree Rings, Environment and Humanity. Radiocarbon, Tucson, AZ.

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USEPA. 1997. Guidelines for preparation of the comprehensive state water quality assessments (305(b) reports) and electronic uptakes. EPA-841-B-97-002A. Washington, D.C.

· It would also seem helpful to the process to involve landowners and the trade organizations that represent them. NMED distributes 319 grant funding from the USEPA in New Mexico, and perhaps a more diverse approach can be implemented when distributing these funds. This could involve landowners by encouraging them to be proactive in promoting their current resource protection activities and incorporating greater efficiency with new management tools. In addition, landowners will have the necessary information on the listed segments in their areas, the process of listing segments, the process of de-listing segments; and the practices in their operations that have or will minimize run-off and protect water and land resources.

***RESPONSE**: Your comment will be passed on to the SWQB Watershed Protection Section. SWQB recognizes the need for more education on water quality monitoring, assessment, and listing processes to land owners and managers, and has begun developing an outreach program to address this issue. We hope to hold a series of meetings around the state in the late fall or early winter.*

Regarding 319 fund, the SWQB Watershed Protection Section issues two different Requests for Proposals (RFPs). The focus is to first form a watershed group so that there is a local entity in the watershed to then apply for on-the-ground monies. The approaches are described below:

Watershed Group Formation RFP

The SWQB Watershed Protection Section requests proposals from individuals, organizations, and governmental entities for the purpose of developing or assisting with development of a watershed group in areas where total maximum daily loads (TMDL) have been written or where data has been assessed and will lead to future TMDL development. The goal of this RFP is to develop watershed groups in areas where none exists or where assistance is needed to ensure that the existing watershed group encompasses the entire eight-digit watershed. The watershed group will develop strategies that focus in the future on best management practice (BMP) implementation that address TMDLs. A TMDL can be best described as a subwatershed budget for pollutant influx to a watercourse. TMDLs are established for individual stream segments by pollutant. The SWQB develops TMDLs for waters listed on the Clean Water Act (CWA) section 303(d) list of impaired waters. The TMDL documents are planning documents that provide pollution reduction targets and guidance on how to reduce pollutant loads. All TMDLs in a particular watershed should be prioritized and included in the watershed group's watershed restoration action strategy (WRAS) in order to address impairments in an orderly and holistic manner. Watershed group formation is the precursor to future funding opportunities for on-the-ground projects to implement BMPs that address TMDLs and rehabilitate impaired stream reaches listed in this RFP.

On-the-Ground RFP

The SWQB Watershed Protection Section requests proposals from established watershed groups for the purpose of implementing on-the-ground projects within specified watersheds in order to reduce pollutant loads and restore the health of the watershed. On-the-ground projects must apply best management practices (BMPs) in order to implement Total Maximum Daily Loads (TMDLs) in impaired stream reaches

within the watershed. All TMDLs in a particular watershed should be prioritized and included in the watershed group's watershed restoration action strategy (WRAS) in order to address impairments in an orderly and holistic manner. A TMDL can be best described as a subwatershed budget for pollutant influx to a watercourse. TMDLs are established for individual stream segments, by pollutant. The SWQB develops TMDLs for waters listed on the Clean Water Act (CWA) section 303(d) list of impaired waters. The TMDL documents are planning documents that provide pollution reduction targets and guidance on how to reduce pollutant loads.

· Ranchers are for the first time in many years, being encouraged to use fire in their efforts to restore the rangeland to natural savannah conditions. This used to be a common practice but actions from certain environmental groups prevented the use of burns for control of woody species that degraded water quality. Even though some bureaus in NMED are encouraging burns, air quality regulations continue to make this endeavor complicated.

***RESPONSE**: Your comment will be passed on to the Air Quality Bureau. SWQB recognizes the role of fire in the natural ecosystem.*

Thank you in advance for your attention and we look forward to answers to the questions posed here as well as participation the remainder of this process.

Sincerely,

Mike G. Casabonne

President

cc: Water Quality Control Commission

COMMENT SET 11 -- New Mexico Wool Growers, Inc.

May 11, 2004

New Mexico Environment Department
Surface Water Quality Bureau
Room N2163
Attn: Lynette Guevara
P.O. Box 26110
Santa Fe, New Mexico 87502

FAX: 505.827.0160
EMAIL: lynette_guevara@nmenv.state.nm.us

RE: New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) 2004-2006 State of New Mexico Clean Water Act (CWA) Integrated Section 303(d)/305(b) List of Assessed Surface Waters (Integrated List).

Dear Ms. Guevara:

Thank you for the opportunity to comment on the above caption proposal. The New Mexico Wool Growers, Inc. (NMWGI) appreciates the need to safeguard water quality based on assessment standards that incorporate sound, repeatable science.

NMWGI would like to go on record as stating that the 305(b) draft document should have been included for public comment. The 305(b) document incorporates descriptions of nonpoint sources of pollution, recommendations and strategy for controls and is the basis of the methodology for assessment protocols used for evaluation. The public should be able to comment on the entire document, not just a complicated, technical analysis. The 303(d) list is based on scientific criteria and language and in order to make substantive comments, an individual needs to have extensive knowledge of the technical procedures. Landowners and the general public are usually not scientists, hydrologists, or engineers, so the process is extremely difficult, if not impossible. New Mexico Environment Department (NMED) integrates the 305(b) with the 303(d) list for review by the United States Environmental Protection Agency (USEPA), so its inclusion would be a logical progression of documents for public comment. By not allowing public comment on the 305(b) document the public is barred from reviewing or contributing to an integral part of a report that may affect them directly in the future. NMWGI requests that NMED make the 305(b) report available for public comment with an extension of the comment period for an additional thirty days.

***RESPONSE**: The SWQB prepares the text of the draft 305(b) report as a summary of surface water quality information contained in the 303(d) list. Summary information on ground water and drinking water quality programs is also provided to the SWQB for inclusion in the 305(b) report by other agencies charged with monitoring and protecting water quality in the state.*

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- It would also seem helpful to the process to involve landowners and the trade organizations that represent them. NMED distributes 319 grant funding from the USEPA

in New Mexico, and perhaps a more diverse approach can be implemented when distributing these funds. This could involve landowners by encouraging them to be proactive in promoting their current resource protection activities and incorporating greater efficiency with new management tools. In addition, landowners will have the necessary information on the listed segments in their areas, the process of listing segments, the process of de-listing segments; and the practices in their operations that have or will minimize run-off and protect water and land resources.

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***RESPONSE**: Your comment will be passed on to the Air Quality Bureau. SWQB recognizes the role of fire in the natural ecosystem.*

Thank you in advance for your attention and we look forward to answers to the questions posed here as well as participation the remainder of this process.

Sincerely,

B.J. Brock
Executive Director

cc: Water Quality Control Commission

COMMENT SET 12 – Public Service Company of New Mexico

Lynette Guevara
NMED SWQB
Room N2163
PO Box 26110
Santa Fe NM 87502

Submittal by e-mail to lynette_Guevara@nmenv.state.nm.us

Ms. Guevara

This letter is to supply comment on the draft 2004-2006 State of New Mexico Clean Water Act (CWA) Integrated Section 303(d)/305(b) List of Assessed Surface Waters (Integrated List), specifically the segment titled San Juan River Navajo bnd at Hogback to Animas River, Assessment Unit ID: NM-2401_10. This comment is only directed at the impairment listing for SBD/sediment.

On April 22, 2004 I attended a meeting of the San Juan Watershed Group, this group has been meeting for the last few years to try and develop input to New Mexico's TMDL development in the four corners region. The group sent a comment letter in 2002 that stream bottom deposits/sediment in the regions surface waters were the result of natural erosion in large dry arid drainage areas, susceptible to the frequent short and heavy precipitation events, with resulting short duration heavy suspended solids in the arroyos feeding the local rivers and lakes.
At this meeting there were presentations by NMED on the draft Integrated list and a preliminary report of the data and findings by Andrew Simon of the National Sediment Lab, a contractor for NMED. The presentation was an in depth review of current and historical available sediment data. The findings were that historically the local rivers had much more sediment loading than they do today mainly due to blockage by Navajo Dam. Current loadings are orders of magnitude lower today than pre-dam. The data also showed that the majority of sediment transport into the rivers today is coming from area arroyos, specifically Canyon Largo drainage, during flash floods.

I have also been very involved with the local program San Juan River Implementation Plan which is a federal program with two goals: 1) Recovery of two endangered fish, 2) continued development of water resources in the river. This program has recommended flows that mimic the hydrograph pre-dam and assist in the recovery of the two fish species. The program is also a player in the re-operation of Navajo Dam to supply the needed flows. I agree with NMED that these federal programs are stringent enough to implement the water quality standards of the applicable stream segment. I support the decision by NMED in the draft Impairment Listing under SBD/sediment to place this stream segment in Category 4B.

***RESPONSE**: The National Sedimentation Lab report needed to develop the assessment protocol and make these final determinations is not available at this time. Accordingly, SWQB is not planning to change any of the previous listings related to Stream Bottom Deposits in the San Juan, Animas, or La Plata Rivers until the information is available. Once the protocol is drafted based on the results of the National Sedimentation Lab study and reviewed by USEPA, SWQB plans to open this limited portion of the list for a 30-day public comment period. This approach is supported by USEPA. This limited opening is tentatively scheduled to begin at the July 2004 WQCC meeting.*

Although there may be no cost effective measure to reduce the sediment load from Cañon Largo, it may be possible to modify the timing and magnitude of releases from Navajo Dam to help entrain and transport sediment loads from Cañon Largo down the San Juan River. This approach is consistent with the recommendations of the San Juan River Basic Recovery Implementation Program to assist in the recovery of two endangered fish species. If the San Juan River reaches below Navajo Dam are determined to be impaired due to excessive stream bottom deposits based on the results of the National Sedimentation Lab study and subsequent assessment protocol, these reaches may be most appropriately placed in Category 4B according to USEPA's integrated listing methodology (USEPA 2001):

> *Impairment Categories --*
>
> *4. Impaired for one or more designated uses, but does not require development of a TMDL because:*
>
> *…B. Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future. Consistent with the regulation under 130.7(b)(i),(ii), and (iii), AUs are listed in this subcategory where other pollution control requirements required by local, state, or federal authority are stringent enough to implement any water quality standard (WQS) applicable to such waters.*

References:

USEPA. 2001. 2002 Integrated water quality monitoring and assessment report guidance. Memorandum from Robert H. Wayland, Office of Wetlands, Oceans, and Watersheds. Washington, D.C

Sincerely,

Rob Ashman
Environmental Analysis SJGS
Public Service Company of New Mexico

COMMENT SET 13 – San Juan Citizens Alliance

Lynette Guevara
NMED SWQB
Room N2163
P.O. Box 26110
Santa Fe, NM 87502

May 12, 2004

Re: Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(D)/305(B) List of Assessed Waters; HUC 14080104

Dear Ms. Guevara:

The San Juan Citizens Alliance participates in the San Juan Watershed Group, the Animas River Stakeholder Group, and the Animas Nutrients Work Group. We appreciate the opportunity to comment on the Draft 2004-2006 Integrated Listing. Our comments are generally limited to those segments that these groups have been involved in sampling.

We support all of the recommendations of NMED SWQB for support and non-support of uses and for listings for the following segments.

River	Segment	AU	Listing/De-listing
San Juan	Animas to Canon Largo	NM- 2401_00	Fecal coliforms
San Juan	Canon Largo to Navajo Dam	NM-2405_10	Remove turbidity
San Juan	San Juan River to Estes	NM-2403.A_00	Fecal coliforms
Animas	Estes to Colorado	NM-2402_00	Temperature
San Juan	Navajo bnd at the Hogback to Animas	NM-2401_10	Fecal coliforms

Though we have not participated in sampling we concur on the listing of the La Plata AU: NM-2402.A_00 for dissolved oxygen and fecal coliforms as we have followed the process that the NMED has used.

***RESPONSE**: SWQB acknowledges and appreciates your concurrence with the above-proposed listings.*

One listing that we do not concur with is the listing for nutrients on the Animas from the San Juan to Estes Arroyo (AU: NM-2403.A_00). The Animas Nutrients Work Group has not finalized the results from the October sampling effort and the New Mexico part of that effort is not included in the Integrated Listing Record of Decision. It is our opinion that given the omission of this information, coupled with the continued work to assess these parameters by a coordinated effort in the basin, including the State of New Mexico, that listing is not warranted at this time. We respectfully ask that you do not list this segment for this reason.

***RESPONSE**: The New Mexico part of the Animas Nutrients Work Group October sampling effort was included in the draft Record of Decision and Integrated List that were open for 30-day public comment (April 13 – May 13). These results were also presented at the San Juan*

Watershed Group meeting April 22, 2004. A slightly revised version of this presentation will be posted on our website. SWQB conducted a standard nutrient survey at four sites on the Animas River. The data collected by SWQB formed the basis of the listing decision, and the other data, if available, would have been used to complement the SWQB data set. The results from other parties in the Animas Nutrient Work Group were not available at the time the draft listing was developed. Even so, adequate data was collected by SWQB in order to determine the nutrient impairment listing based on the Nutrient Assessment Protocol (INMED/SWQB 2004). SWQB believes listing of this reach is warranted at this time.

References: NMED/SWQB. 2004. Guidance for Nutrient Assessment of Streams. Last revision May 2004. Santa Fe, NM.

The Working Group is applying for funding to a number of places to sample for a second year. The coordinated efforts of almost all of the major entities in the basin to asses the state of nutrients in the river should greatly aid in the protection of water quality in the future.

Sincerely,

Charles Wanner
Water Issues Coordinator

Cc:
Virgil Frazier, Division Head, Environmental Programs
Michiko Burns, Water Quality Manager, Environmental Programs
Fred Kroeger, President, Southwestern Water Conservation District
Janice Sheftel, Maynes, Bradford, Shipps and Sheftel

COMMENT SET 14 – San Juan Water Commission

May 12, 2004

Ms. Lynette Guevara
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502

Via e-mail(lynette_guevara@nmenv.state.nm.us) and U.S. mail

Re: Comments of San Juan Water Commission on Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(d)/305(b) List of Assessed Surface Waters

Dear Ms. Guevara:

Pursuant to the public notice of a 30-day comment period on the New Mexico Environment Department's ("NMED") draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(d)/305(b) List of Assessed Surface Waters ("Draft Section 303(d) List"), I hereby submit the following comments to NMED on behalf of the San Juan Water Commission ("SJWC").

First, let me note that SJWC commends NMED's efforts to safeguard water quality throughout the state and appreciates all of the hard work NMED has put into assessing the State's surface waters (particularly its intensive survey of the San Juan River Basin in 2002) and developing the Draft Section 303(d) List.

SJWC's comments concerning the Draft Section 303(d) List pertain to new listings in the San Juan River Basin. In particular, SJWC is concerned about the fact that the new listings may be based primarily on water quality data collected during the extreme drought of 2002, when stream flows may have been below assigned critical low flows. In addition, SJWC questions the necessity of listing stream segments based on bioassays, which do not indicate that any particular water quality standard is violated in that segment.

1. If the new impairment listings in the San Juan River Basin are based on water quality data taken during the drought of 2002, they should be removed from the Draft Section 303(d) List unless impairment is confirmed by water quality data taken when stream flow was at or above the critical low flow.

With respect to the critical low flow issue, SJWC is concerned about the water quality data used to newly assess the following stream segments as impaired and schedule them for Total Maximum Daily Load ("TMDL") development during 2004:

- San Juan River from the Navajo Nation boundary at Hogback to the Animas River (TMDL to be developed for total fecal coliform);
- Animas River from the San Juan River to Estes Arroyo (TMDLs to be developed for "nutrient/eutrophication biological indicators" and total fecal coliform);
- Animas River from Estes Arroyo to the Colorado border (TMDL to be developed for water

temperature);

- La Plata River from the San Juan River to the Colorado border (TMDLs to be developed for dissolved oxygen and total fecal coliform); and

- Gallegos Canyon from the San Juan River to the Navajo Nation boundary (TMDL to be developed for selenium).

SJWC believes it is not in the best interest of the state to list stream segments as impaired if the water quality data on which the impairment decision is based was collected during drought conditions when stream flow was less than the critical low flow. As recognized by EPA in its *Water Quality Standards Handbook: Second Edition* (1994), at § 5.2, "[w]ater quality standards should protect water quality for designated uses in critical low-flow situations . . . [and] States may designate a critical low-flow below which numerical water quality criteria do not apply." Further, "[n]umeric water quality criteria should apply at all flows that are equal to or greater than [EPA critical low-flow recommendations]." SJWC believes the Water Quality Control Commission ("WQCC") has adopted a policy recognizing that numeric criteria do not apply at less than critical low flows: "The numeric standards . . . may not be attainable when stream flow is less than the critical low flow of the stream in question." 20.6.4.10(B) NMAC. Thus, if the impairment listings noted above are based on water quality data collected when stream flows were at less than the assigned critical low flow, SJWC urges NMED and, ultimately, the WQCC, to remove those listings from the final Section 303(d) List.

SJWC currently is not privy to all of the water quality data used by NMED to determine stream impairment in the San Juan River Basin. However, based on the information contained in the Record of Decision, SJWC does believe it is likely that NMED based at least some of its impairment decisions primarily on data collected during its intensive water quality survey of the Basin in 2002—one of the driest years on record for the Basin. It is troubling that the *State of New Mexico Procedures for Assessing Standards Attainment for the Integrated §303(d)/§305(b) Water Quality Monitoring and Assessment Report: Assessment Protocol* ("Assessment Protocol") indicates that NMED will use, and give preference to, data collected during drought conditions and other instances when stream flow is less than the critical low flow to find that a stream is impaired and place the stream on the state's Section 303(d) List:

> In general, data collected by SWQB during these intensive water quality surveys is combined with available data collected the same year by other entities partially listed below, provided the organizations' sampling methods meet state QA/QC requirements. . . . This collated data set forms the basis of impairment decisions.
>
> Additional current data will be considered in the analysis, *particularly available data from the critical condition of the individual parameter of concern, because the CWA requires water quality standards [to] be protective of designated uses during critical conditions such as years with below average stream flow. This distinction is important to mention because it would not meet the intent of the Clean Water Act to use data collected in non-drought conditions to draw a conclusion of no impairment when available data collected during low flow conditions indicates impairment.*

Assessment Protocol at 4 (emphasis added).

***RESPONSE**: As stated in the Assessment Protocol (NMED/SWQB 2004), data collected during all flow conditions, including low flow conditions (i.e., flows below the 4Q3), will be used to determine designated use attainment status during the assessment process. 4Q3 values are to be utilized as minimum dilution assumptions for developing discharge permit effluent limitations. In terms of assessing designated use attainment in ambient surface waters, WQS apply at all times under all flow conditions. SWQB contends that it is the intent of the Clean Water Act to consider all available data from any flow conditions when determining designated use attainment status and has stated so in the Assessment Protocols. USEPA Region 6 has reviewed and provided comment on the Assessment Protocols and did not express any concerns with this understanding.*

References: NMED/SWQB. 2004. State of New Mexico Procedures for Assessing Standards Attainment for the Integrated §303(d)/§305(b) Water Quality Monitoring and Assessment Report. Santa Fe, NM.

Such an approach is unnecessary, is not required by EPA, and will unnecessarily subject the state to expensive and burdensome TMDL requirements on streams that otherwise meet water quality standards at critical low flows and higher flows. Further, SJWC believes TMDLs do not apply at flows less than the critical low flow because TMDLs are calculated at low-flow design conditions adopted by the state—in New Mexico's case, a four-day, three-year (4Q3) low flow for aquatic life standards and the harmonic mean flow for human health standards. 20.6.10(B) NMAC; *see also, Guidance for Water Quality-based Decisions: The TMDL Process*, U.S. EPA, Office of Water, EPA 440/4-91-001, April 1991 (Appendix D at 47) (when developing a TMDL, stream analysis uses low-flow design conditions). Thus, it is both unnecessary and unduly burdensome on the state's economy to develop a TMDL for a stream segment that is not impaired at or above the pertinent critical low flow.

Although SJWC believes that water quality is of critical importance to the welfare of all New Mexicans, SJWC also believes it is adverse to the public welfare of the state when stream impairment decisions are based on data collected during drought conditions or at other times when stream flow is less than the critical low flow. The TMDL process often is long, complex, and expensive, and that process should not be undertaken unless a stream is found to be impaired under the fair application of reasonable criteria. Therefore, SJWC believes it would be both prudent and lawful for NMED to remove each of the stream segments identified above from the final Section 303(d) List if NMED's impairment assessment was based on water quality data taken during the drought of 2002, unless impairment is confirmed by water quality data taken when stream flow was at or above the applicable critical low flow.

***RESPONSE**: SWQB disagrees with SJWC's position that new impairment listings in the San Juan River Basin based on water quality data taken during the drought of 2002 should be removed from the 303(d) List unless impairment is confirmed by water quality data taken when stream flow was at or above the critical low flow. SWQB contends that it is the intent of the Clean Water Act to consider all available data from all available flow conditions when determining designated use attainment status. Data collected in 2002 by SWQB was not the sole basis of the majority of the new listing (see below). Probable Source category 39 "Drought related impacts" was added to the San Juan, Animas, and La Plata River listings.*

Regarding drought, studies have shown that variability in hydrologic conditions is the norm in New Mexico (Grissino-Mayer 1996). New Mexico is currently within this range of variability (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). If we consider the current hydrologic condition in terms of decades, the drier conditions we have experienced over the last several years could be considered typical and normal. Paleo-environmental records indicate that

our region has experienced long periods of drought that lasted decades (Grissino-Mayer 1996). The "drought" conditions we are currently experiencing could actually be the mean condition when considering this time frame. Also, the current drier conditions we are experiencing could last years to decades (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). SWQB must continue to monitor, assessment, and make use impairment determinations under these conditions in order to protect and enhance water quality in New Mexico.

References:
Grissino-Mayer, H. 1996. A 2129-year reconstruction of precipitation for northwestern New Mexico, U.S.A. Pages 191-204 in J. S. Dean, D. M. Meko, and T. W. Swetnam, editors. Tree Rings, Environment and Humanity. Radiocarbon, Tucson, AZ.

Regarding each of the listings SWJC stated above:

- *San Juan River from the Navajo Nation boundary at Hogback to the Animas River (TMDL to be developed for total fecal coliform);*

This determination of fecal coliform impairment was not based solely on bacteriological data collected during the SWQB 2002 intensive water quality survey. This listing was based on BOR data from 2000 and 2001, and USGS data from 2003, as well as the 2002 SWQB data. E. coli data from 2001-2003 were also available for assessment against the proposed E. coli criterion of 410/100 mL. Clarifications were added to the ROD in response to your comment. SWQB contends that there exists sufficient data to determine secondary contact designated use impairment in this portion of the San Juan River.

- *Animas River from the San Juan River to Estes Arroyo (TMDLs to be developed for "nutrient/eutrophication biological indicators" and total fecal coliform);*

This determination of nutrient impairment was not based solely on chemical data collected during the SWQB 2002 intensive water quality survey. This listing was based on a variety of causal and response variable related to nutrient enrichment as detailed in the Nutrient Assessment Protocol (NMED/SWQB 2004a). SWQB considered pH, total nitrogen, total phosphorus, DO concentration, and DO saturation data from 2002 and the Oct 2003 sampling event, as well as Chlorophyll a concentration and Ash Free Dry Mass (AFDM) from the Oct 2003 sampling event. The total nitrogen and total phosphorus exceedence rates agree with 50+ years of USGS nutrient data that was downloaded of the NWIS web site (30% exceedence rate). SWQB contends that sufficient data exist to make this impairment determination.

The total fecal coliform listing was based on 2002 SWQB data and 2002-2003 USGS data. Clarification was added to the ROD. As previously stated in the ROD, there were also 0 of 14 exceedences of the proposed E. coli criterion of 410/100mL. Therefore, this AU was categorized as 5B because the listing will be removed and a TMDL will not be developed if NMED's proposal to switch from fecal coliform to E. coli is adopted by the WQCC and approved by USEPA.

Reference: NMED/SWQB. 2004a. Guidance for Nutrient Assessment of Streams. Last revision May 2004. Santa Fe, NM.

- *Animas River from Estes Arroyo to the Colorado border (TMDL to be developed for water temperature);*

This determination of temperature impairment was not based on data collected during the SWQB 2002 intensive water quality survey. As stated in the ROD, the listing was based on thermograph data collected in 2003 at the Cedar Hill station applied against the Temperature Assessment Protocol (NMED/SWQB 2004b).

References: NMED/SWQB. 2004. State of New Mexico Procedures for Assessing Standards Attainment for the Integrated §303(d)/§305(b) Water Quality Monitoring and Assessment Report. Santa Fe, NM

- *La Plata River from the San Juan River to the Colorado border (TMDLs to be developed for dissolved oxygen and total fecal coliform); and*

The fecal coliform impairment decision was based on data collected at three stations in 2002. The dissolved oxygen listing was based on sonde data collected at two stations July 2002. Based on additional fisheries data that was found while developing a response to BHP Billiton's comment, SWQB has removed the Assessment Unit Comment stating that marginal CWF is likely an inappropriate use since there is evidence of an "existing" coldwater fishery in the La Plata River.

- *Gallegos Canyon from the San Juan River to the Navajo Nation boundary (TMDL to be developed for selenium).*

This determination of selenium impairment was not based solely on chemical data collected during the SWQB 2002 intensive water quality survey. As stated in the ROD, the listing was based on extensive data collected as part of the SJRIP effort. There was 1 of 1 exceedence in the 2002 SWQB dataset. The SJRIP data set contained the following exceedence ratios: 7/8 in 1998, 4/4 in 1999, 2/4 in 2000, 3/4 in 2001, 4/5 in 2002, and 2/4 in 2003. There is significant data over a variety of flow conditions to support this listing.

2. <u>The listing of stream segments based on the results of bioassays may lead to an incorrect public assumption that TMDLs are required for those segments, even though they are not required.</u>

SJWC is somewhat perplexed by the "bioassay" impairment listings for the following stream segments in the San Juan River Basin:

- San Juan River from the Animas River to Cañon Largo ("water bioassays-acute toxicity-freshwater"); and

- Animas River from the San Juan River to Estes Arroyo ("sediment bioassays-acute toxicity-freshwater).

It is SJWC's understanding that, under the Clean Water Act, waters are identified as impaired and are placed on the Section 303(d) List only if they violate an applicable water quality standard. However, a bioassay is not a water quality standard, and bioassay results showing toxicity do not identify the violation of any particular water quality standard. Further, the purpose of the Section 303(d) List is to identify waters requiring TMDLs. Because a TMDL cannot be developed for a bioassay, what is the purpose of placing a stream segment on the Section 303(d) List because of the results of a bioassay? Such a listing may lead the public to incorrectly assume that the stream segment requires a TMDL.

SJWC understands from information you provided to our attorney, Jolene McCaleb, that the stream segments identified above have been placed on the Draft Section 303(d) List because EPA Region 6 has indicated it wants states to start listing waters based on the results of toxicity tests so the states will conduct more intensive water quality studies to determine what is causing toxicity. However, NMED agrees that TMDLs cannot be written for toxicity data, and does not plan to undertake TMDLs for the stream segments identified above unless they are listed for other reasons, *i.e.*, impairment caused by the violation of a particular water quality standard. SJWC appreciates the information you provided with respect to this issue, including the representation that NMED does not intend to take any action based on the bioassay listings other than additional water quality testing. However, should NMED change its position and decide bioassay TMDLs are required, SJWC requests an opportunity to comment on that decision at the appropriate time.

***RESPONSE**: SWQB acknowledges that USEPA requested that SWQB consider all historic toxicity data during development of the 2004-2006 draft integrated list. SWQB also acknowledges that TMDLs cannot be written based on toxicity data until the specific cause of the toxicity is determined. A note was added to the Assessment Unit Comments to clarify this issue.*

Thank you for your consideration of these comments. If further discussion would be helpful, please do not hesitate to contact me.

Sincerely,

L. Randy Kirkpatrick

COMMENT SET 15 – Southern Ute Indian Tribe

May 11, 2004

Lynette Guevara
NMED SWQB
Room N2163
P.O. Box 26110
Santa Fe, NM 87502

Re: Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(D)/305(B) List of Assessed Waters; HUC 14080104

Dear Ms. Guevara:

The Southern Ute Indian Tribe (Tribe) thanks you for the opportunity to submit the following comments regarding the proposed listing of impaired waters under Clean Water Act Section 303(D) and 305(B) specifically of the Animas River (HUC 14080104). The Tribe believes that listing of the Animas River is premature and request that the listing be denied until on-going studies have been completed.

The Tribe is aware that New Mexico Surface Water Quality Bureau (NMSWQB) began its nutrient assessment in 2002, including some data collection. The Tribes believes however, that any assessment of nutrient concerns would be incomplete without incorporating habitat, aquatic community and chemistry data. Furthermore, other "pollutant" and "pollution" factors, such as sediment from the recent wildfires and/or drought conditions currently being experienced should also be examined as part of this analysis of impairment.

As you may be aware, in November 2002, a Work Group composed of the Southern Ute Indian Tribe's Water Quality Program; the States of Colorado and New Mexico; the Colorado Division of Wildlife; the Cities of Durango, Aztec, and Farmington, together with the San Juan Citizens Alliance, San Juan Watershed Group, and Animas River Stakeholders Group, began a cooperative effort to assess water quality issues of concern within the Animas River Watershed, including the problem of nutrification of the Animas River.

The Work Group initiated efforts to profile the quality of water of the Animas River from Hermosa, Colorado, to the confluence of the Animas and San Juan Rivers in New Mexico.

Through various avenues of funding, the group was able to gather water chemistry, habitat, periphyton and macroinvertebrate samples, which aid in a profile of the Animas River to identify areas of concern. The Tribe supports this on-going study of the data collected by the Work Group. The Tribe will allow data collected within the exterior boundaries of the Southern Ute Indian Reservation to be used as part of a comprehensive watershed nutrient assessment.

Under the Explanatory Notes, for the Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(D)/305(B) -List of Assessed Waters, the Southern Ute Indian Tribe suggests that further data collection and analysis work need to be performed. It is unclear how NMSWQB can propose to list the Animas River as impaired without a final assessment that incorporates representative data over time relating to habitat, aquatic communities and chemistry.

***RESPONSE**: The New Mexico part of the Animas Nutrients Work Group October sampling effort was included in the draft Record of Decision and Integrated List that were open for 30-day public comment (April 13 – May 13). These results were also presented at the San Juan Watershed Group meeting April 22, 2004. A slightly revised version of this presentation will be posted on our website. SWQB conducted a standard nutrient survey at four sites on the Animas River. The data collected by SWQB formed the basis of the listing decision, and the other data, if available, would have been used to complement the SWQB data set. The results from other parties in the Animas Nutrient Work Group were not available at the time the draft listing was developed. Even so, adequate data was collected by SWQB in order to determine the nutrient impairment listing based on the Nutrient Assessment Protocol (NMED/SWQB 2004). This listing was based on a variety of causal and response variable related to nutrient enrichment, including habitat, aquatic communities, and chemical indicators. SWQB believes listing of this reach is warranted at this time and does not require further data collection and analysis. Any additional data collected through the Animas Workgroup would provide useful information towards the development of a TMDL for this lower portion of the Animas River.*

References: NMED/SWQB. 2004. Guidance for Nutrient Assessment of Streams. Last revision May 2004. Santa Fe, NM.

Therefore, the Tribe would like to see the Animas River removed for the list of impaired water until further data collection and analyses have been completed.

Sincerely,

Howard D. Richards, Sr., Chairman
Southern Ute Indian Tribal Council

Cc: Connally Mears, Director, Tribal Assistance Program, EPA, Region VIII
Bernadette Gonzalez, Project Officer, EPA, Region VIII
Bruce Zander, TMDL Coordinator, EPA, Region VIII
Daniel Beley, Lower Colorado Watershed Coordinator, CDPH&E
Janice C. Sheftel, Esq., Maynes, Bradford, Shipps & Sheftel, LLP.
Michiko Burns, Southern Ute Indian Tribe Water Quality Program

COMMENT SET 16 – City of Farmington

CITY OF FARMINGTON
800 Municipal Drive
Farmington, NM 87401-2663

MAY 11, 2004

Ms. Lynette Guevara
NMED SWQB
Room N2163
P.O. Box 26110
Santa Fe, NM 87502

Dear Ms. Guevara:

Thank you for allowing the City of Farmington to review and offer comments to the draft 2004-2006 State of New Mexico Clean Water Act (CWA) Integrated Section 303(d)/305(b) List of Assessed Surface Waters (Integrated List). After careful review of the document, we offer the following comments:

Impairment Comments:

- Previous actions (1998, 2000, 2002) do not identify fecal coliform as a cause of "non-support" to either the San Juan or Animas Rivers. Both the 1998 and 2000 periods were above average precipitation. Previous monitoring of these rivers has been too random, i.e., not consistent over time. The designation appears to be set with only very limited number of monitoring events that may lead to biased conclusions. Additionally, 2002 - 2003 monitoring events that occurred in extreme drought conditions may not accurately represent the actual impairment of the river system by fecal coliform over a longer study period in normal climatic occurrences.

  Water temperature is influenced by river flow, i.e., less water available for stream flow means greater water temperature. Warmer water temperatures promote bacteria growth. Low flow river conditions during the monitoring period very likely resulted in an increase in water temperature, thus contributing to the quantities of fecal coliform found in the river segments. During normal flow conditions, a lower water temperature would have provided less favorable conditions promoting bacteria growth.

  More monitoring is needed before designating the stream segments, such as the San Juan River (Animas River to Canon Largo) and other segments, as "not supporting secondary contact possibly as the result of total fecal coliform." After future monitoring occurs to establish more accurate and normal base lines, a review of designated uses would be appropriate.

  ***RESPONSE**: The San Juan River (Animas to Cañon Largo) was first listed for pathogens on the 1996 list, and fecal coliform on the 1998, 2000, and 2002 list based on data retrieved from STORET – the national USEPA water quality data repository. SWQB agrees that previous monitoring was too random, which is partially why we designed and implemented an intensive water quality survey of the San Juan River basin in 2002.*

As detailed in the ROD, the proposed 2004 listing for fecal coliform impairment was not based solely on bacteriological data collected during the SWQB 2002 intensive water quality survey. This listing was also based on BOR data from 2000 and 2001 as well as the 2002 SWQB data. E. coli data from 2001-2003 were also available for assessment against the proposed E. coli criterion of 410/100 mL. Clarifications were added to the ROD in response to your comment. SWQB contends that there exists sufficient data to determine secondary contact designated use impairment in this portion of the San Juan River. Probable Source category 39 "Drought related impacts" was added to the San Juan, Animas, and La Plata River listings.

Regarding drought, studies have shown that variability in hydrologic conditions is the norm in New Mexico (Grissino-Mayer 1996). New Mexico is currently within this range of variability (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). If we consider the current hydrologic condition in terms of decades, the drier conditions we have experienced over the last several years could be considered typical and normal. Paleo-environmental records indicate that our region has experienced long periods of drought that lasted decades (Grissino-Mayer 1996). The "drought" conditions we are currently experiencing could actually be the mean condition when considering this time frame. Also, the current drier conditions we are experiencing could last years to decades (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). SWQB must continue to monitor, assessment, and make use impairment determinations under these conditions in order to protect and enhance water quality in New Mexico.

As stated in the Assessment Protocol (NMED/SWQB 2004), data collected during all flow conditions, including low flow conditions (i.e., flows below the 4Q3), will be used to determine designated use attainment status during the assessment process. 4Q3 values are to be utilized as minimum dilution assumptions for developing discharge permit effluent limitations. In terms of assessing designated use attainment in ambient surface waters, WQS apply at all times under all flow conditions. SWQB contends that it is the intent of the Clean Water Act to consider all available data from any flow conditions when determining designated use attainment status and has stated so in the Assessment Protocols. USEPA Region 6 has reviewed and provided comment on the Assessment Protocols and did not express any concerns with this understanding.

References:

Grissino-Mayer, H. 1996. A 2129-year reconstruction of precipitation for northwestern New Mexico, U.S.A. Pages 191-204 in J. S. Dean, D. M. Meko, and T. W. Swetnam, editors. Tree Rings, Environment and Humanity. Radiocarbon, Tucson,AZ.

NMED/SWQB. 2004. State of New Mexico Procedures for Assessing Standards Attainment for the Integrated §303(d)/§305(b) Water Quality Monitoring and Assessment Report. Santa Fe, NM.

There is some confusion in the measurement of stream standards for bacteria. Our previous information was that NMED was being urged by the Environmental Protection Agency (EPA) to change the bacteria standards to those based upon *E. coli* standards and not on the fecal coliform standards used in the document. Will future standards be based on *E.* coli, as we have been previous informed, or will they continue to be based upon fecal coliform standards? If the change will be to E. coli, as previously presented to

us, when will this change occur?

***REPONSE**: USEPA is urging states to include E. coli criterion in contact use water quality standards. SWQB proposed the switch from fecal coliform to E. coli at the recent (February 2004) WQCC triennial review hearing of water quality standards. A decision from the WQCC regarding adoption of the new E. coli standard is expected sometime this fall. The proposal, if adopted by the WQCC, would then be submitted to USEPA Region 6 for final approval.*

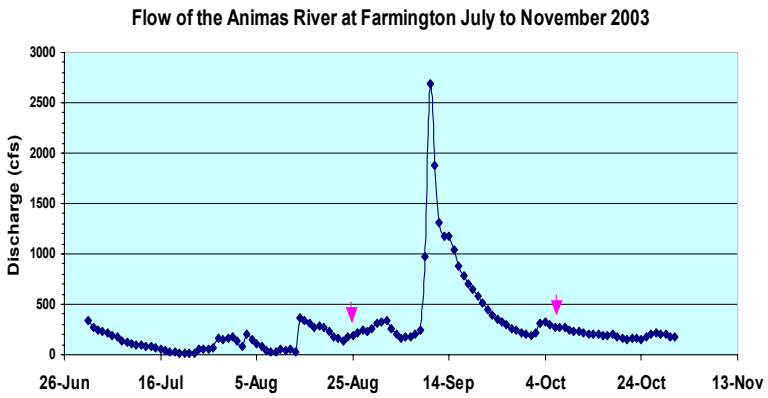
During development of the biennial integrated 303(d)/305(b) list, we are required to compare all readily available and existing data against the current water quality standards and associated criteria. Although we have adequate data to list both fecal coliform and E. coli at this time for several assessment units in the San Juan River basin, we are required to assess and list fecal coliform because the current criterion is fecal coliform. We are also required to develop a TMDL for this particular listing by December 31, 2004, as stated in the consent decree (Forest Guardians and Southwest Environmental Center v. Carol Browner, Administrator, US EPA, Civil Action 96-0826 LH/LFG, 1997). SWQB plans to include calculations for both fecal coliform and E. coli in the TMDL in anticipation of the switch to E. coli.

- The excessive sedimentation or stream bottom sediments study is not completed at this time, nor has the San Juan Watershed Group made this a high priority. A recent presentation made by USDA National Sedimentation Lab seemed to suggest that sediment from Canon Largo and other ephemeral streams contribute substantially to the stream bottom sediments found in the San Juan River and that the amount of sediment changes over the river's course. Again, the amount of sediment is influenced by river flow. When the data is available and before it is incorporated into the document the stakeholders should have an opportunity for public comment.

  ***RESPONSE**: There were existing stream bottom deposit listings (from 1996 on) for all reaches on the Animas and San Juan Rivers. Therefore, these listings are considered to be part of the consent decree (Forest Guardians and Southwest Environmental Center v. Carol Browner, Administrator, US EPA, Civil Action 96-0826 LH/LFG, 1997). The National Sedimentation Lab report needed to develop the assessment protocol and make final determinations regarding these existing listings is not available at this time. Accordingly, SWQB is not planning to change any of the previous listings related to Stream Bottom Deposits in the San Juan, Animas, or La Plata Rivers until the information is available. Once the protocol is drafted based on the results of the National Sedimentation Lab study and reviewed by USEPA, SWQB plans to open this limited portion of the list for a 30-day public comment period. This approach is supported by USEPA. This limited opening is tentatively scheduled to begin at the July 2004 WQCC meeting.*

- The Animas River Nutrient Assessment monitored two segments of the Animas River (Animas River - Estes Arroyo to Colorado border and San Juan River to Estes Arroyo) for nutrients, dry ash, and dissolved oxygen. The October 2003 monitoring occurred immediately after recharge events that flushed the system into the Animas River (San Juan to Estes Arroyo) resulting nutrient loading. The occurrences of this flushing would skew monitoring results. To more fully assess the impact that nutrients are having on the system more monitoring is needed before.

***REPONSE**: SWQB and the Animas River Nutrient Workgroup collected data on a suite of chemical and biological indicators at two stations in the upper Animas assessment unit and two stations in the lower Animas assessment unit. This October sampling event did not occur immediately after the high flow event of September 10, 2003. The workgroup had planned to sample in September, but waited until October, recognizing n that the system needed time to recover from the September 10th event. The relatively high amount of algal biomass measured during the October survey indicated ample recovery time for this indicator and, while the overall exceedence ratios was over 15%, the nutrient levels did not exceed the criteria during this October sampling event.*



As stated in the ROD, this listing was based on a variety of causal and response variable related to nutrient enrichment as detailed in the Nutrient Assessment Protocol (NMED/SWQB 2004). SWQB considered pH, total nitrogen, total phosphorus, DO concentration, and DO saturation data from 8 samples collected in 2002 as well as the two 2003 sampling events, shown above. The Chlorophyll a concentration and Ash Free Dry Mass (AFDM) that were measured during the October 2003 sampling event would likely have increased had the sampling occurred later. SWQB contends that sufficient data exist to make this impairment determination.

References: NMED/SWQB. 2004. Guidance for Nutrient Assessment of Streams. Last revision May 2004. Santa Fe, NM.

- Not establishing a TMDL for mercury at the same time frame that other TMDLs are established prohibits uniformly applying a TMDL policy. Using 1981 data identifying mercury in fish tissue in San Juan River (Animas River to Canon Largo), (Canon Largo to Navajo Dam), and other segments as causes for non-support based presence of mercury is questionable. The presence of mercury determination should be updated.

***REPONSE**: It is not necessary to establish mercury TMDLs in the same time frame as other TMDLs in the basin. SWQB is required to list Mercury in Fish Tissue as an impairment for all waters listed in the current Fish Consumption Guidelines (NMDOH et al. 2001, USEPA 2003). SWQB agrees that the guidelines need to be updated. We are pursuing funding options from USEPA and are also initiating improved coordination efforts between the New Mexico Department of Health, New Mexico Department of Game and Fish, and NMED via a Memorandum of Agreement regarding development of fish consumption guidelines.*

References:

New Mexico Department of Health (NMDOH), New Mexico Environment Department, and New Mexico Department of Game and Fish. 2001. Fish consumption guidelines due to mercury contamination. Revised February 2001. http://www.nmenv.state.nm.us/swqb/Mercury.pdf. Santa Fe, NM.

USEPA. 2003. 2004 Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act. Office of Water, Washington, D.C. July 21, 2003

Changes in Designated Use:

- Designated Uses for Farmington Lake need to be re-evaluated. One specific concern is the proposal designating Lake Farmington as fully supporting Livestock Watering and Wildlife Habitat but not recognizing it as a Municipal Water Supply. This designation is not appropriate since Farmington Lake serves as a raw water storage facility for more than 50,000 people on the municipal system. We must emphatically state that Farmington's drinking water supply reservoir, known as Farmington Lake, is strictly used as a public water supply reservoir and is not used for any types of agricultural purposes (livestock). Although some wildlife may be present in the vicinity of the lake, our maintenance force patrols the shores to discourage or, prevent their presence. All animals are discouraged from the vicinity of the lake to minimize the presence of fecal coliform/E. Coli and decomposing animals from polluting the municipal water system.

  ***RESPONSE**: Livestock watering and wildlife habitat are default designated uses that apply to all waters in New Mexico according to 20.6.4.10 NMAC. The recognition of a use either by designation or default does not imply authority or permission for that use. It establishes a level of protection for the use in the event the use occurs. Additional statements were added to the Assessment Unit Comment on the list to indicate that livestock watering is prevented to the extent possible in order to protect this municipal water supply. Proposed changes to currently assigned designated uses cannot be addressed through the 303(d) listing process, and are instead proposed through revisions to the water quality standards. SWQB recognizes that this lake should be classified as Municipal Water Supply and has added this to the list of items to be addressed in future changes to the water quality standards.*

- The San Juan River segment - Navajo boundary at Hogback to Animas River and several other segments do not support a marginal coldwater fishery as a designated use. In fact, coldwater fish are not native to the LaPlata River (San Juan River to Colorado), another identified segment. Although a designated use at this time, the proposal to designate a marginal coldwater fishery use for these segments should be re-examined as the designation may not be appropriate because of natural water temperature changes. In addition, the San Juan Recovery Implementation Plan designates the protection of warm water fish endangered species in these segments.

  ***REPONSE**: The draft integrated 303(d)/305(b) list does not contain a proposal to designate marginal coldwater fishery use for any particular segment. The references to these designated uses in the draft list are based on existing designated uses in the current State of New Mexico Water Quality Standards (NMAC 20.6.4). Changes to WQS occur through revisions to the water quality standards.*

An "existing use" is defined in the State of New Mexico Water Quality Standards as a use actually attained in a surface water of the state on or after November 28, 1975, whether or not they are included in the water quality standards as a designated use (20.6.4.7.Q NMAC). There are historic fisheries data for several stations throughout the New Mexican portions of the La Plata, Animas, and San Juan Rivers that indicate a marginal coldwater fishery existed after this date due to the presence of speckled dace and roundtail chub (Miller and Rees 2000, Sublette et al 1990). In addition, mottled sculpin has been collected in the San Juan River downstream of the confluence with the Animas River (NMNHP 2000). According to Biotic Information System for New Mexico (BISON-M) (NMDG&F 2004), these three native species are considered coldwater taxa. Based on this additional fisheries data that was found while developing a response to BHP's comment, SWQB has removed the Assessment Unit Comment stating that marginal CWF was likely an inappropriate use since there is evidence that there is an "existing" coldwater fishery in the La Plata River.

References:

Miller, W.J. and D. E. Rees. 2000. Ichthyofaunal Surveys of the Tributaries of the San Juan River, New Mexico. Fort Collins, CO.

New Mexico Department of Game and Fish in cooperation with USBOR, USBLM, USFS, USFWS, USCOE, and University of New Mexico. 2004. Biotic Information System for New Mexico (BISON-M). http://www.cmiweb.org/states/.

New Mexico Natural Heritage Program (NMNHP). 2000. Fishes of New Mexico Database and GIS. Biology Department, University of New Mexico. Albuquerque, NM.

Sublette, J.E., M.D Hatch, and M Sublette. 1990. The Fishes of New Mexico. New Mexico Department of Game and Fish. UNM Press. Albuquerque, NM.

Again, we thank you for allowing us to comment on this document. If you have questions, please contact me at (505) 599-1301.

Sincerely,

Joe Schmitz
Community Development Director

cc: Ruben Salcido, O & M Contracts Manager
Jeff Smaka, Sr. Projects Engineer
Paul A. Montoia, Water Resources Manager
Ron Rosen, OMI
Monica Peterson, OMI

COMMENT SET 17 – The Southwestern Water Conservation District

May 10, 2004

Lynette Guevara
NMED SWQB
Room N2163
P.O. Box 26110
Santa Fe NM 87502

Re: Draft 2004-2006 State of New Mexico Clean Water Act Integrated Section 303(D)/305(B) List of Assessed Waters; HUC 14080104

Dear Ms. Guevara:

Thank you for allowing the Southwestern Water Conservation District ("District") to comment on the above-referenced document.

The District has contributed funds for the studies of a Work Group composed of the Southern Ute Indian Tribe; the States of Colorado and New Mexico; the Colorado Division of Wildlife; the Cities of Durango, Aztec, and Farmington, together with the San Juan Citizens Alliance, San Juan Watershed Group, and Animas River Stakeholders Group. The Work Group was established to discuss a water quality issue that had become apparent in the Animas River Watershed: an algae bloom in 2002 from Basin Creek, in Colorado, through the Southern Ute Indian Reservation into New Mexico. At the time, the Southwest Colorado/Northwest New Mexico region was experiencing historic drought conditions, perhaps a one in 300-year occurrence, as well as sediment- and fire retardant-laden run off following major wild fires.

***RESPONSE**: As stated in the Assessment Protocol (NMED/SWQB 2004), data collected during all flow conditions, including low flow conditions (i.e., flows below the 4Q3), will be used to determine designated use attainment status during the assessment process. 4Q3 values are to be utilized as minimum dilution assumptions for developing discharge permit effluent limitations. In terms of assessing designated use attainment in ambient surface waters, WQS apply at all times under all flow conditions. SWQB contends that it is the intent of the Clean Water Act to consider all available data from any flow conditions when determining designated use attainment status and has stated so in the Assessment Protocols. USEPA Region 6 has reviewed and provided comment on the Assessment Protocols and did not express any concerns with this understanding. Probable Source category 39 "Drought related impacts" was added to the San Juan, Animas, and La Plata River listings.*

Regarding drought, studies have shown that variability in hydrologic conditions is the norm in New Mexico (Grissino-Mayer 1996). New Mexico is currently within this range of variability (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication). If we consider the current hydrologic condition in terms of decades, the drier conditions we have experienced over the last several years could be considered typical and normal. Paleo-environmental records indicate that our region has experienced long periods of drought that lasted decades (Grissino-Mayer 1996). The "drought" conditions we are currently experiencing could actually be the mean condition when considering this time frame. Also, the current drier conditions we are experiencing could last years to decades (Dr. Craig Allen, USGS – Jemez Mountain Field Station, personal communication).

SWQB must continue to monitor, assessment, and make use impairment determinations under these conditions in order to protect and enhance water quality in New Mexico.

References:
Grissino-Mayer, H. 1996. A 2129-year reconstruction of precipitation for northwestern New Mexico, U.S.A. Pages 191-204 in J. S. Dean, D. M. Meko, and T. W. Swetnam, editors. Tree Rings, Environment and Humanity. Radiocarbon, Tucson, AZ.

NMED/SWQB. 2004. State of New Mexico Procedures for Assessing Standards Attainment for the Integrated §303(d)/§305(b) Water Quality Monitoring and Assessment Report. Santa Fe, NM.

The Work Group initiated a cooperative effort to profile the quality of water of the Animas River from Hermosa, Colorado, to the confluence of the Animas and San Juan Rivers in New Mexico. Through various avenues of funding, including funding for the District, the Group was able to gather water chemistry, habitat, periphyton and macroinvertebrate samples to begin assessing water quality issues of concern within the Animas River Watershed, including the problem of nutrification of the Animas River. The analysis is ongoing. It is the District's understanding that New Mexico's studies on this issue are also ongoing.

***RESPONSE**: The New Mexico part of the Animas Nutrients Work Group October sampling effort was included in the draft Record of Decision and Integrated List that were open for 30-day public comment (April 13 – May 13). These results were also presented at the San Juan Watershed Group meeting April 22, 2004. A slightly revised version of this presentation will be posted on our website. SWQB conducted a standard nutrient survey at four sites on the Animas River. The data collected by SWQB formed the basis of the listing decision, and the other data, if available, would have been used to complement the SWQB data set. The results from other parties in the Animas Nutrient Work Group were not available at the time the draft listing was developed. Even so, adequate data was collected by SWQB in order to determine the nutrient impairment listing based on the Nutrient Assessment Protocol (NMED/SWQB 2004). This listing was based on a variety of causal and response variable related to nutrient enrichment, including habitat, aquatic communities, and chemical indicators. SWQB believes listing of this reach is warranted at this time and does not require further data collection and analysis. Any additional data collected through the Animas Workgroup would provide useful information towards the development of a TMDL for this lower portion of the Animas River.*

References: NMED/SWQB. 2004. Guidance for Nutrient Assessment of Streams. Last revision May 2004. Santa Fe, NM.

Therefore, the District respectfully requests that the State of New Mexico SWQB remove the Animas and La Plata Rivers from this proposed impaired listing and delay the implementation of any TMDL process until the Work Group and the State of New Mexico can collect truly representative, watershed wide, data and can complete appropriate data analyses. There is currently insufficient data for a designation of impairment.

***REPONSE**: As stated above, SWQB believes adequate data exist to list the Animas River (San Juan River to Estes Arroyo) for nutrient impairment at this time. No reasons are provided as to why the Southwestern Water Conservation District is requesting removal of the La Plata River dissolved oxygen and fecal coliform listings, so no response is provided. The rationale for these listings are provided in the ROD.*

Sincerely,

SOUTHWESTERN WATER CONSERVATION DISTRICT

Fred V. Kroeger, President

Cc: Board of Directors, Southwestern Water Conservation District
EPA, Region VIII, Water Director
EPA, Region VI, Water Director
Dan Belay, CDPH&E, Lower Colorado Watershed Coordinator
Janice Sheftel, Maynes, Bradford, Shipps & Sheftel
Steve Harris
Randy Seaholm, Colorado Water Conservation Board

COMMENT SET 18 – Los Alamos National Laboratory (see Response of Comments Part 2)